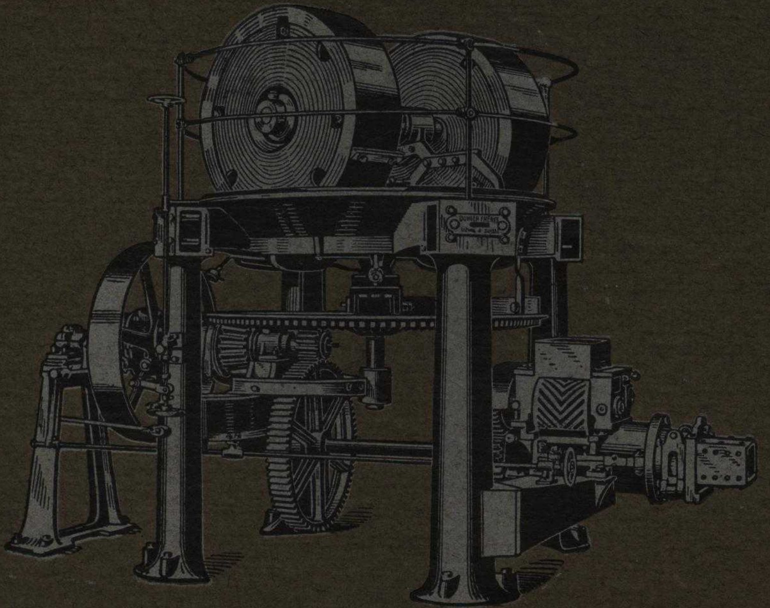
Buhler



Brick-making-machinery

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BUHLER

BUHLER BROTHERS

ENGINE WORKS, IRON AND METAL FOUNDRIES

UZWIL (SWITZERLAND)

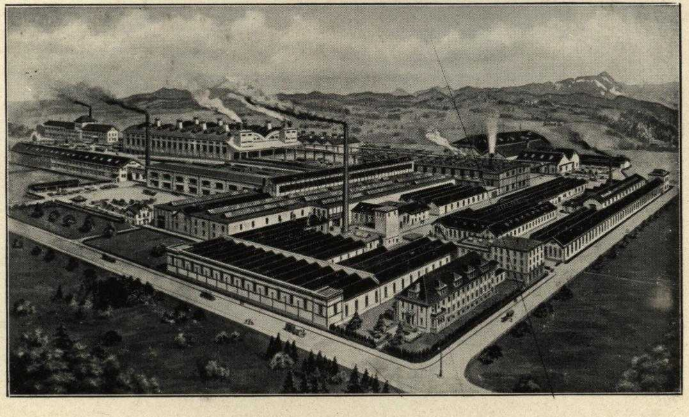
ESTABLISHED 1860

◆

ABOUT 1800 EMPLOYEES

◆

TURIN 1911
GRAND PRIX



Telegraphic Address:
BUHLER UZWIL

◆

BERN 1914:
GRAND PRIX

Department: **Brick-making machinery.**

4

BRANCHES AND SELLING DEPOTS:

PARIS
42, Rue du Louvre

MILAN
9, Via Dante

NAPLES
Palazzo della Borsa

BARCELONA
Calle de Santa Ana 28

ROME
Corso Umberto I^{0} 300

PHALERUM
Greece

MOSCOW
Mjassnitzkaja Kriwok 9

Selling Conditions.

Time of delivery. The dates of delivery are so fixed than they can in all probability be adhered to. If strike, lock-out or boycott, accident or breakdown-whether at the works of Buhler Brothers or their chief sub-contractors or at the establishments of transport agents — shortage of waggons, force majeure, or the absence of the requisite data, should seriously interfere with the adherence to the agreed time of delivery, the same shall be extended correspondingly, and the same shall apply in case of non-fulfilment or belated fulfilment of the stipulated terms of payment, in the latter case without prejudice to the contractor's right to cancel the contract.

The following items shall, unless otherwise agreed, **be debited to the purchaser:** packing, freights, duties and other transport charges ex Uzwil, likewise any constructional work, foundation work, erection and starting.

Erection. If desired, Buhler Brothers can provide competent fitters, the charge for whom is .... per man per working day of 10 hours and .... for every Sunday and holiday, plus travelling expenses out and home including the transport of luggage and tools. Time occupied in travelling is reckoned as working time. Any assistant workmen, scaffolding and lifting gear, lighting of premises as well as any constructional or masonry work that may be required by the staff supplied by Buhler Brothers, shall in all cases be furnished by the purchaser at his expense; the latter shall also bear the risk of accident to assistant workmen and shall be entirely responsible for them.

If a lumpsum price is arranged for erection and starting and if the staff of Buhler Brothers, through no fault of its own, is delayed in its work or detained longer than is required for the purpose of erection and immediate starting, or if it is employed in work other than that undertaken by the Contractor, the time lost or thus occupied over and above what is necessary, as well as any second journey on the part of the staff rendered necessary through such delays shall be paid for extra, according to the rates of Buhler Brothers.

Conditions of payment:

For Swiss clients: 1/3 with order
1/3 on notification that goods are ready for despatch
1/3 three months later.

For foreign clients: 1/2 with order
1/2 on notification that goods are ready for despatch.

All deliveries and works not included in the estimate and in respect of which no special arrangement exists, shall be paid for in cash within 30 days after receipt of invoice.

In case of destruction of or damage to the goods, which are in all cases forwarded for the account and at the risk of the purchaser, as well as in case of delays in starting through the fault of the purchaser, accident or force majeure, the payments shall be made as if normal delivery and starting had taken place.

The punctual fulfilment of the conditions of payment shall not be affected by any work which may be involved by the terms of the guarantees given.

Buhler Brothers shall remain the proprietors of the whole of their deliveries (machinery, spare parts, accessories) until the completed payment of the full purchase price together with any interest for arrears.

Liability: The purchaser shall in all cases be entirely responsible for the goods ex station of despatch, and shall himself attend to the punctual insurance, say against fire risk. In case of destruction or damage of any kind, Buhler Brothers will look solely to the purchaser.

Place of fulfilment of contract and jurisdiction: Uzwil for both parties.

Plans and illustrations: We supply on receipt of order all plans relating to our installations and furnish all illustrations free of charge. If the order should not be given, the plans are to be returned to us as under:

at once if the order is given to a third party;

at latest within 6 months of receipt of same if the installation has not been carried out within that time.

In both cases, unless otherwise arranged, the expenses incurred shall at the same time be made good to us in accordance with the scale of the Swiss Association of Engineers and Architects.

Guarantee: Buhler Brothers grant in respect of the material, construction and workmanship of their deliveries a guarantee covering .... months from the date of delivery, under which guarantee they undertake to make good at their own expense any faults shown to be due to defective material or faulty workmanship, as well as to replace any faulty parts by good ones. This guarantee does not cover normal wear and tear nor the consequences of faulty erection if the same has not been carried out by Buhler Brothers, neither will they be responsible for damage and accidents caused by faulty or violent treatment, excessive strain or force majeure.

In case of non-fulfilment of guarantees in respect of single machines or apparatus supplied, Buhler Brothers shall only be bound to take back their deliveries, returning in such case the part payments received on account of the same. They will recognise no other liability or claims for compensation.

In the case of entire installations the provisions of the Swiss Law on the subject shall apply in the event of non-fulfilment of the guarantees assumed.

Buhler Brothers liability under the guarantee shall cease at once and in all cases if any alterations or repairs are carried out by another party without their approval.

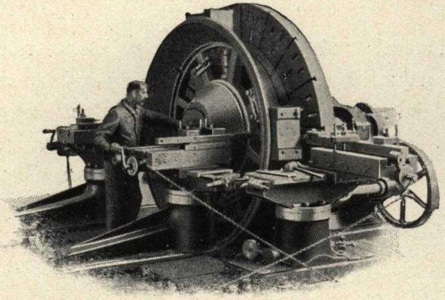
They will assume no liability or obligations not expressly provided for in the foregoing. This applies more especially to any claims for compensation for the consequences of delay in delivery, erection or starting or for faulty delivery, no matter whether the loss has been caused directly through such fault or indirectly through subsequent deliveries, repairs or alterations or through the exchange or taking back of materials.

Even in cases in which the legislation of a country may entail the liability of a contractor, Buhler Brothers shall nevertheless not be answerable for the consequences of interrupted or defective working up to the end of the time covered by their guarantees, or resulting from delays in erection and starting, interruptions in working and stoppages caused by renewals for which they are responsible, by exchange or taking tack of deliveries, repairs and alterations.

After completed reception of the deliveries through the purchaser, Buhler Brothers are released from all responsibility with the exception of the foregoing guarantees in regard to material, construction and workmanship.

The above „General Selling Conditions“ shall in all cases form an integral part of the conditions of the order, unless they have been set aside by special contractual arrangement.

The Multiple Grinding and Mixing Mill, Buhler's Patent.



The Multiple Grinding and Mixing Mill is the only practical and rational machine for manufacture on a large scale which overcomes the drawbacks that all previous methods have been found to suffer from. It permits the **fullest and most intensive treatment of no matter what material,** whether hard, soft, rich, thin or mixed with foreign substances (root fibres, lime etc.). The material is first reduced by the heavy top runner and pressed through a grating of suitable width of bars, whereupon it falls in strips on the bed underneath. These strips are here triturated once more and pressed through gratings with narrower openings. This process is repeated a third or fourth time according to requirements. After leaving the collector, which is situated underneath the lowermost bed, the material is conveyed direct to the moulding machine.

Thinning material is added direct; previous reduction is not necessary, as the grinding mill readily destroys large blocks of clay etc. and thoroughly mixes and unites the thinning material, such as sand, slags, etc. with the raw material. The material is put in **straight from the bank without washing, weathering or mixing;** blocks the size of a man's head are reduced by our Multiple Grinding Mill, which destroys and disintegrates all natural injurious texture. A great advantage of this method is **the production of a uniform merchandise practically free from fibres or texture.**

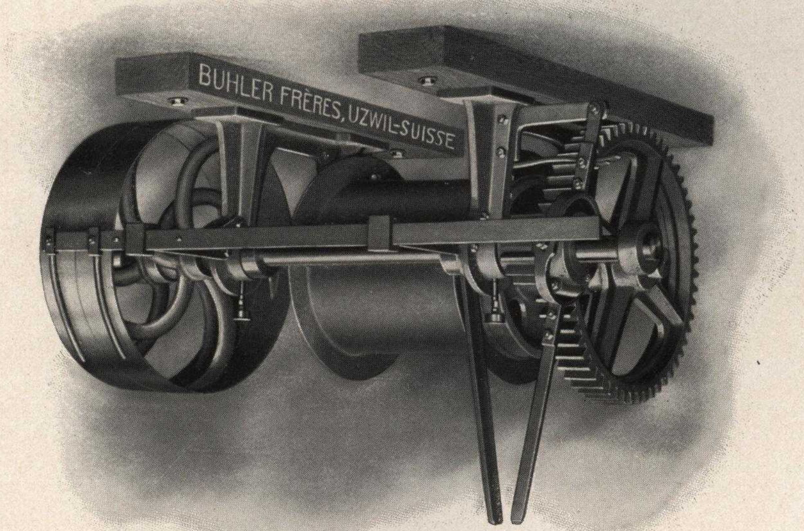
By reason of this intensive mixing and preparation of the raw material, the product is also suitable for **rapid and artificial drying.**

It is not only for difficult material that our grinding mill replaces the many types of treating machines hitherto in use; it does infinitely better work and offers at the same time the advantage of great **economy of power combined with increased capacity and a minimum of floor space.**

The material may either be fed in by hand or else dumping-cars or tip-waggons can be emptied into our automatic hopper which feeds the material forward in a regular, adjustable manner.

The Grinding Mill works quite automatically and requires very much **less attention** than other clay-working systems. It also means a **reduction in the cost of manufacture** as clay pits containing injurious admixtures or hard, stony material can be worked more thoroughly.

Our grinding mills are made throughout of the very best selected raw materials and the margin for working strain has been liberally calculated throughout. Parts subject to wear and tear can easily be adjusted or replaced. The grate-bars are of cast steel or steel plate rivetted on to cast steel frames and are hardened by a special process. All runners have interchangeable rings of chilled cast iron and can easily be weighted by filling as may be required. Cross-heads, scraper arms, cranks, etc. are of steel. Hence there is a **minimum of wear and tear of all working parts,** and they can easily be exchanged on account of the simple construction of the machine.



Dumping Car Hoist, F P Model

Dumping Car Hoist, F P Model

Experience having shown that it is often very unpractical to mount the clay hoist on the floor, entailing more rapid wear of the rope, we have constructed the hoist illustrated overleaf which can also be mounted on the ceiling.

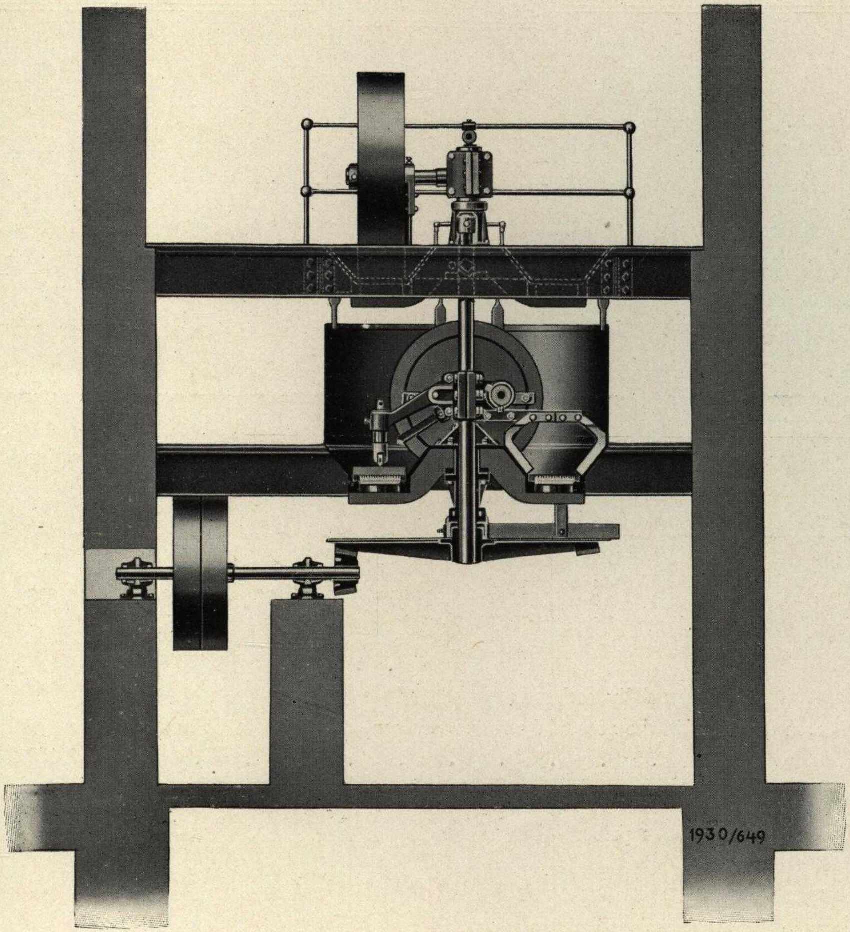
It serves for conveying laden dumping cars from the clay pit to the working machine and for letting down the empty dumping cars.

The winding gear consists of a drum to which the rope is fixed, the fast and loose pulley, the disconnecting gear and the band brake for letting down the emptied dumping car. The hoist is equipped with belt and piston disconnecting gear.

Dimensions, weights, prices, etc.

Model	Pulley		Diam. of drum	Revs. per minute abt.	Approx. weight	Price	Code-Word
	Diam.	Width					
	mm	mm	mm		kg		
F P	750	130	480	70	650		Refloat

The above price does NOT include wire rope, frame work, rails and dumping cars.



Double Grinding
and Mixing Mill.
F B III Model
Buhler's Patent
enclosed within walls

Double Grinding and Mixing Mill, F B III Model

Buhler's Patent.

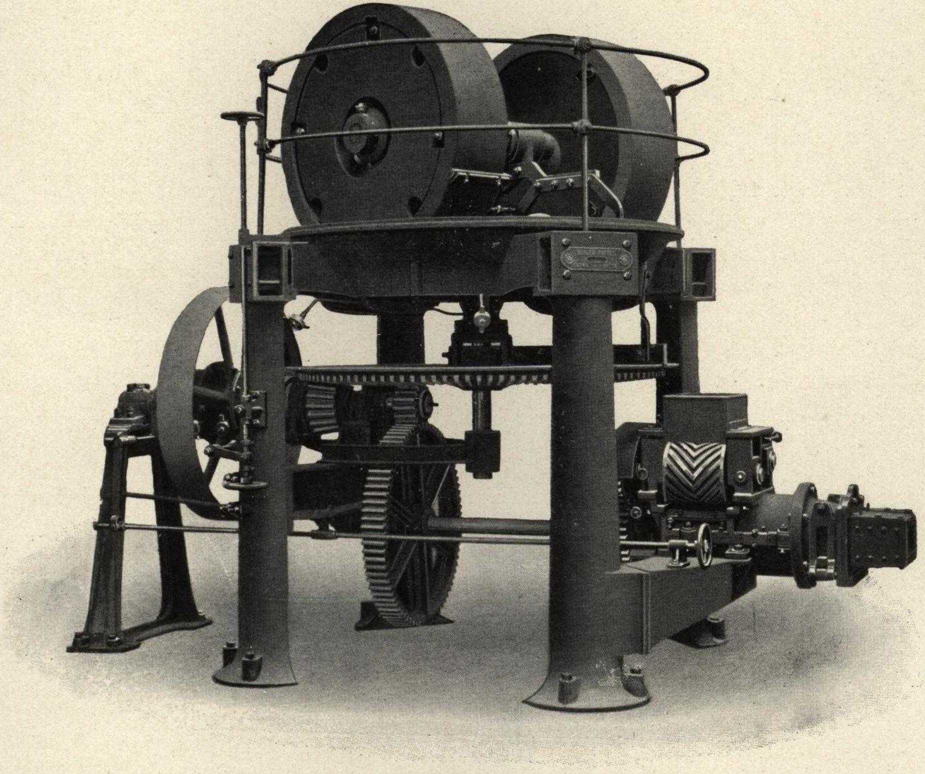
For materials which are easy to treat a Double Grinding and Mixing Mill may in some cases be used in place of the Treble Type. The quantity treated is of course the same and the difference lies only in the quality of the treatment.

The working is exatly the same in every particular as in the Treble Grinding Mill; the construction may be described as that of a Treble Grinding and Mixing Mill, F B III model, from which the middle crusher bed with accessories has been omitted.

Dimensions, weights, prices, etc.

Model	Dimensions			Runners		Pulley			Daily capacity	Approximate weight	Prices	Code-Words
	Total height	Height from floor to distribution table	Floor space	Number	Diameter	Diam.	Width	Revs. per min.				
	mm	mm	m		mm	mm	mm			kilos		
F B III Double	5400	3950	3,5×3,5	1 1	1700 1300	1100	220	120	up to 30,000 Standard bricks	13,700	....	Realegro
If specially ordered: A second runner of 1300 mm diameter in the second bed supplied complete with the Grinding Mill:										2,450	....	Realete

The disconnecting mechanism is charged to the customer and is arranged in mounting to suit the local conditions. The iron frame-work is not included in the above price.



Grinding and Mixing Mill Plant, F B L Model, single type
Buhler's Patent.

Grinding and Mixing Mill Plant, F B L Model, single type

Buhler's Patent.

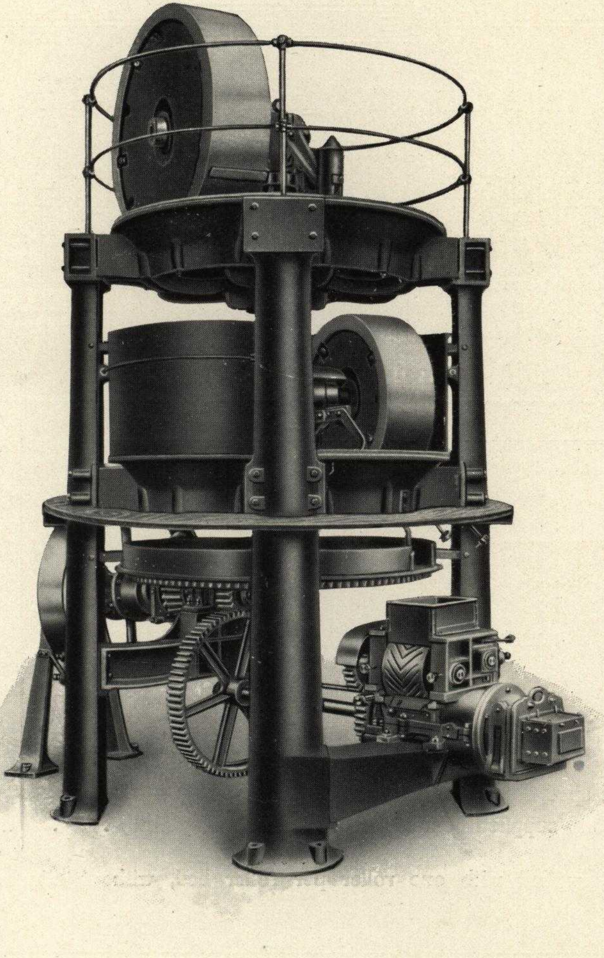
In addition to our patent Multiple Grinding and Mixing Mill we also construct a Single Grinding Mill Plant consisting of a patented arrangement with combined helical feed press, F L Model. When the raw material is more than usually amenable to treatment and in cases where the product to be manufactured does not demand any special conditions as to delicacy of material, this machine can be used to advantage.

In contrast to all other systems, our Grinding and Mixing Mill, type F B L, presents the advantage of a combined helical feed press. We supply the machine according to requirements with one or two runners of 1300 to 1700 mm. diameter and these runners can be weighted very considerably. As in our other F B L models, the drive is effected by a single pulley combined with a patent friction spring coupling, so that the Grinding Mill itself and the helical feed press can be used either in combination or independently as may be required.

Dimensions, weights, prices, etc.

No.	Runners		Dimensions		Driving Pulley			Approximate weight	Prices	Code-Words
	Number	Diameter	Height from floor to distributing floor	Floor space	Diam.	Width	Revs. per min.			
		mm	mm	m	mm	mm		Kilos		
1	1	1500	2600	3,5×5	1500	250	120	15,400	....	Rebatar
2	1	1700	2600	3,5×5	1500	250	120	15,650	....	Rebatias
3	2	1300	2600	3,5×5	1500	250	120	17,600	....	Rebasando
4	2	1500	2600	3,5×5	1500	250	120	18,000	....	Rebatedor

The above data refer to the standard type with combined helical feed press F L II model, without attachment plate and without moulds.



Grinding and Mixing Mill
Plant, F B L Model

Buhler's Patent

double type

Grinding and Mixing Mill Plant, FBL Model

Buhler's Patent.

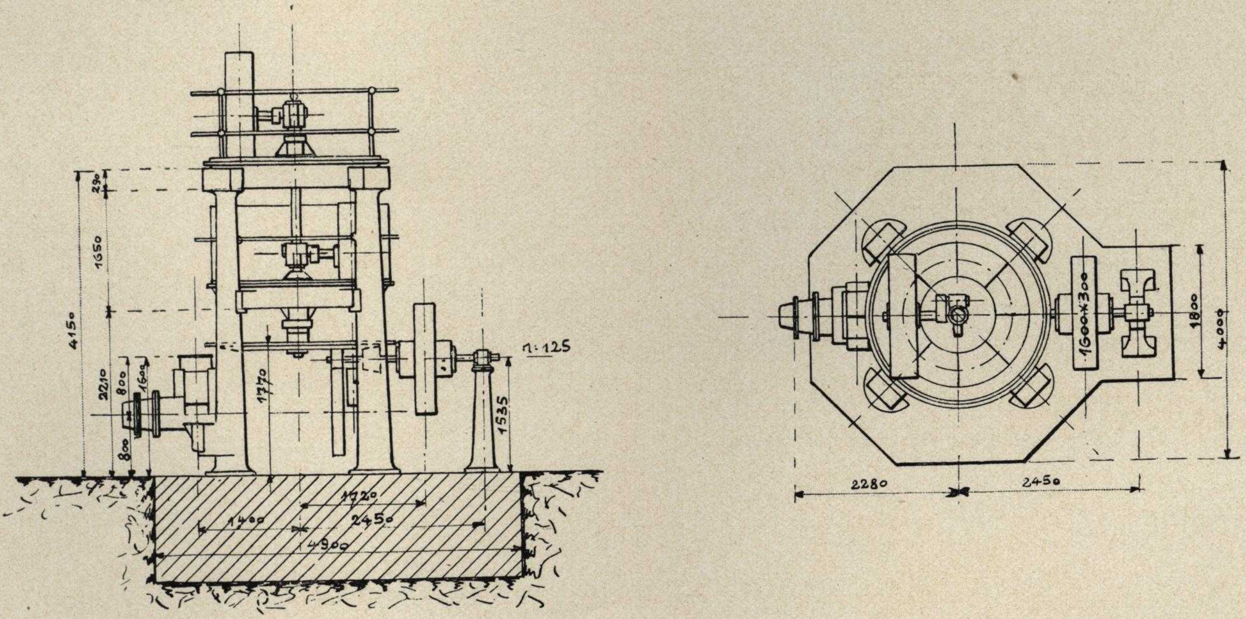
Our patented Grinding and Mixing Mill Plant, F B L model, is the result of the combination of a Grinding Mill of the F B IV type and a helical feed press, F L model. This combined type, which is driven by a single belt and rests on a single foundation, completes in itself the machinery plant of a brick-works, seeing that it carries out both the preliminary treatment and the moulding of the clay. The clay, coming direct from the bank, is fed on to the topmost runner bed and the treated strips of material issue from the mouth-piece of the machine.

The driving shaft is fitted with two patented friction couplings which permit the separate disconnection of the Grinding Mill and press and consequently enable the Grinding Mill and press to be worked either separately or in combination.

Dimensions, weights, prices, etc.

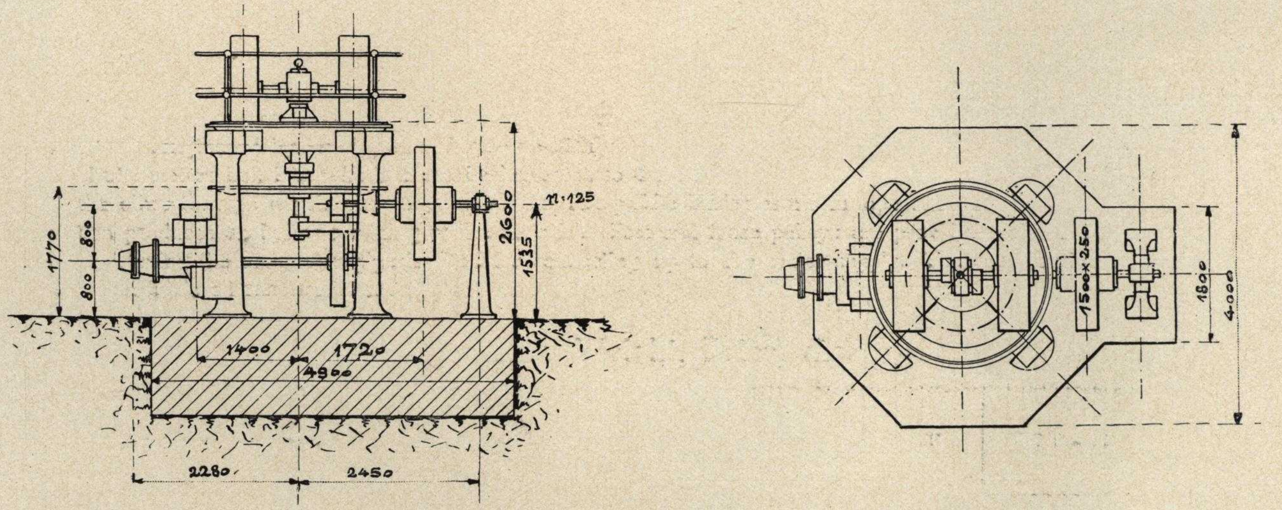
Model		Dimensions			Runners		Pulley		Revs. per min.	Approximate weight	Prices	Code-words
Grinding Mill	Helical Feed press	Height over all	Height from floor to distributing table	Floor space	Numbers	Diameter	Diam.	Width				
		mm	mm	m		mm	mm	mm		kilos		
Double	F L II	5700	4250	3,5 × 5	1 1	1700 1300	1600	300	120	22, 000		Rebanego
Treble	F L II	7350	5900	3,5 × 5	1 2	1700 1300	1600	300	120	29, 050		Rebarder
Double	F L III	5700	4250	3,5 × 5	1 1	1700 1300	1600	300	120	23, 000		Rebanos
Treble	F L III	7350	5900	3,5 × 5	1 2	1700 1300	1600	300	120	30, 050		Rebasaban
If specially ordered:												
1 additional roller of 1300 mm. diam. supplied complete with the Grinding Mill . .												

The standard machine is supplied with one roller per roller bed, without attachment plate and moulds and without cutting table.



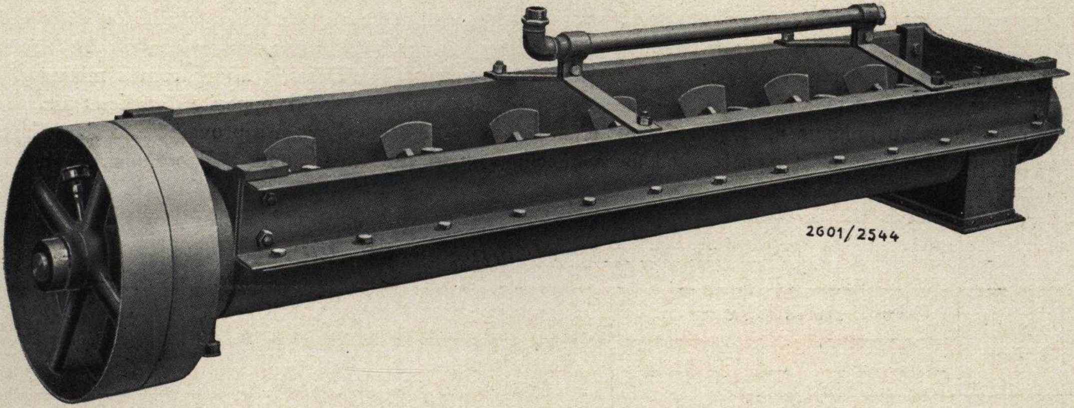
Double Mixing and Crushing Mill, Model F B L

Buhler Patent. Scale 1 : 100



Single Mixing and Crushing Mill, Model F B L

Buhler Patent. Scale 1 : 100



Mixing Machine, Model F N 1

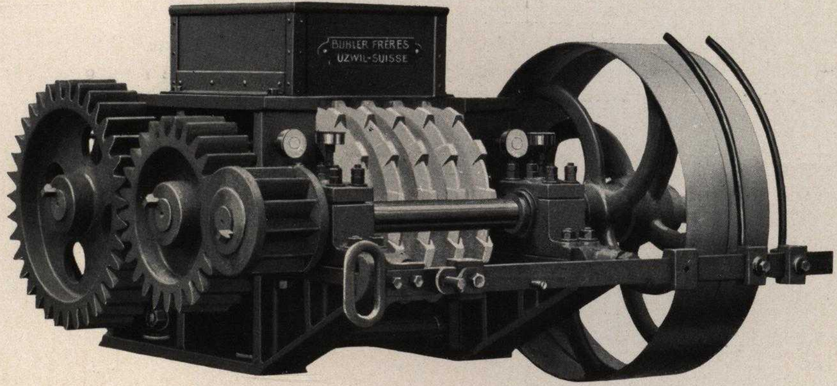
Mixing Machine, Model F N 1

This machine has been designed for mixing various materia's such as Cement, Lime, Sand, Chamotte, Coal, Clay etc. and consists of two mixing shafts provided with interchangeable helical paddle blades, one half of which serves for mixing and the other half for conveying purposes. One end of the trough is arranged with a delivery branche for the outlet of the material while its entire length is strengthened by two ⊏ iron channels which carry the bearings for the mixing shafts. The trough, as designed, has a length of $2^{1}/_{2}$ metres but, if required, it can be increased to 4 metres. The Drive is direct from a mixing shaft and is communicated to the other through a pair of spur gear wheels. The paddle blades work in opposite directions and the irregularity of their construction produces an intimate mixing of the material. Fast and loose pulleys are provided and these have a diametre of 500 mm. For moistening the material a pipe is fitted for connecting up to the water supply. The Construction of the machine is extremely solid and fulfils all requirements.

Dimensions, Weight, Price, etc.

Model No.	Space required			Pulley		Weight	PRICE	Codeword
	Overall length	Width	Height	Diam.	Width			
	mm	mm	mm	mm	mm	kg.		
F N 1	3000	550	500	500	100	677		Refloreo

The illustration on the other side is not binding concerning the construction of the parts of the machine, neither the figures given for capacity or power required.



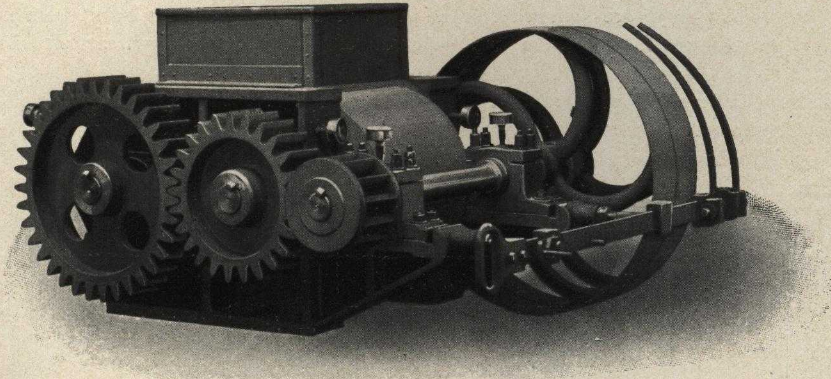
Crusher Roll Mill, F A VII and VII a Models

Crusher Roll Mills, F A Model

These machines are built like the Studded Roll Mill, F A IV model, but in place of the rollers with interchangeable steel studs, this model is furnished with CRUSHER ROLLS which not only draw the clay satisfactorily into the machine, but also in many cases crush it even better than the above-mentioned roll mill. Like the studded roll mill, the crusher roll mill may be mounted over a smooth roll mill and thus be worked as a combined plant.

Dimensions, weights, prices, etc.

Model	Space required			Rollers		Pulley		Revs. per min.	Approx. weight	Price	Code-Word
	Length	Width	Height	Diam.	Width	Diam.	Width				
	mm	mm	mm	mm	mm	mm	mm		kg		
VII a	1300	1100	700	350	350	650	130	100	900	....	Recolabar
VII	1500	1600	800	450	400	750	120	150	1420	....	Recolabo



Smooth Rolling Mill, Model F A V

(Nos. ~~1~~, 5 ~~and 8)~~

Smooth Rolling Mills

The construction of all Smooth Rolling Mills consists primarily of two smooth rollers either of cast iron or with casehardened jackets, a powerful set of gear-wheels and the driving pulleys. One of the rollers is adjustable and can be provided with rubber buffers in order that the rollers may give somewhat in the event of a greater pressure being momentarily exerted or through the passage of some hard foreign substance. The drive can be arranged either on the right or left hand as desired or as local conditions necessitate.

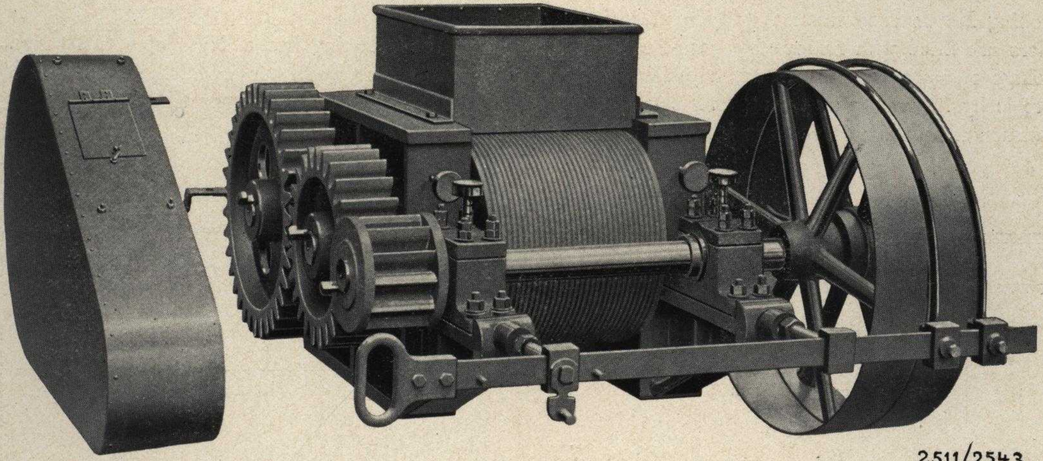
The rollers revolve in long bronze bushes fitted with grease lubrication. Necessarily the construction is extremely solid.

When used as a Fine Crushing Mill the rubber buffers mentioned above are replaced by pins. By this means the rollers are kept a fixed distance apart and an even product is obtained.

Dimensions, Weight, Prices etc.

Model	Space required			Rollers		Pulley		R. p. m.	Approx. weight	PRICE with Rollers		Codeword
	Length	Width	Heihgt	Diam.	Width	Diam.	Width			Cast iron	with case-hardened jackets	
	mm	mm	mm	mm	mm	mm	mm		kg			
~~F A 1~~	~~1300~~	~~1100~~	~~700~~	~~350~~	~~350~~	~~650~~	~~130~~	~~125~~	~~900~~			~~Recogieses~~
F A 5	1500	1600	800	450	400	750	120	150	1420			Recogitavi
~~F A 8~~	~~1900~~	~~1600~~	~~1000~~	~~600~~	~~500~~	~~900~~	~~150~~	~~140~~	~~2300~~			~~Recognosco~~

The illustration on the other side is not binding concerning the construction of the parts of the machine, neither the figures given for capacity or power required.



2511/2543

Grooved Rolling Mill, Model F A 5

Grooved Rolling Mill, Model F A 5

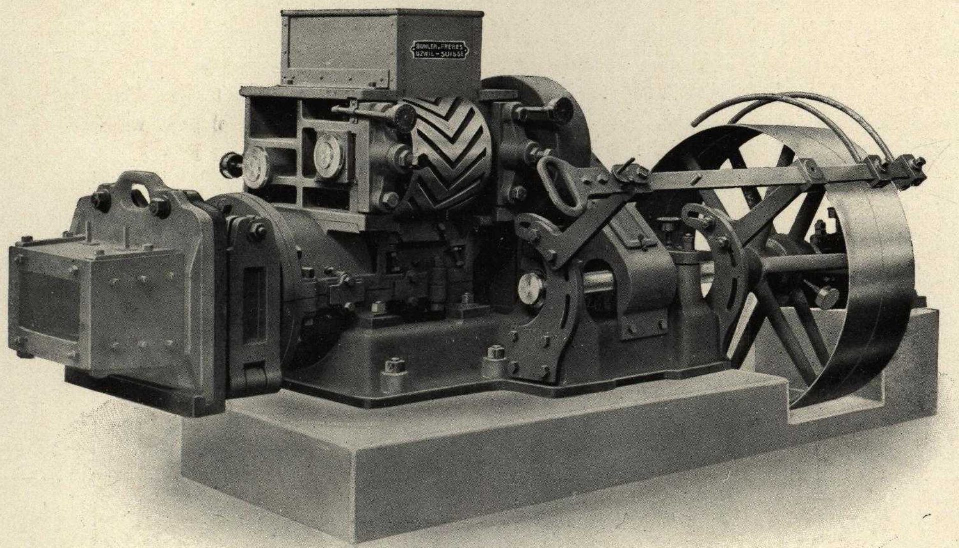
For Crushing Chips, Chamotte, Coke etc.

This Rolling Mill is used when a gritty mixture is required.
The Rollers are fitted with removeable case-hardened jackets and the grooving has a depth of 8 to 10 mm.
The Bearings of one of the rollers are adjustable and provided with spring buffers to avoid the possibility of fracture.
The Drive is by intermediate gearing and is transferred to both rollers by means of gear wheels.
The Construction in other respects is identical with our Smooth Rolling Mill, Model F A 5.

Dimensions, Weight, Prices etc.

Model	Space required			Rollers		Pulley		R. p. m.	Approx. weight	PRICE with Rollers		Codeword
	Length	Width	Height	Diam.	Width	Diam.	Width			Cast iron	with case-hardened jackets	
	mm	mm	mm	mm	mm	mm	mm		kg			
F A 5	1500	1600	800	450	400	750	120	150	1420	....	....	Recolados

The illustration on the other side is not binding concerning the construction of the parts of the machine, neither the figures given for capacity or power required.



Helical Feed Press, F L I Model

Helical Feed Press, F L I Model.

Our new Helical Feed Press combines all improvements which long practical experience has taught us are desirable.

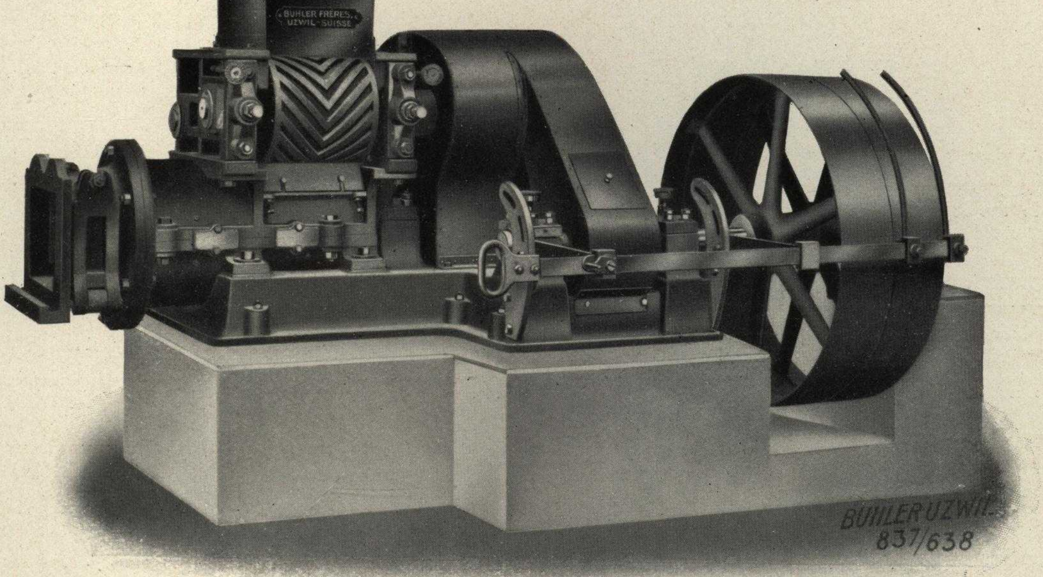
The cylinder of the press, which is in two parts, is furnished with a removable jacket of steel plate. The shaft of this press, which is of steel and exceedingly solid, is squared at the front end. The helical feed gear parts mounted on the same have interchangeable cast steel edges rivetted on to them; after removal of the counter blades, which can be pulled out sideways, they can without dismounting the cylinder be conveniently taken out in front. The thrust bearing of the shaft is constructed as a special ball bearing. The feeding of the press is effected by means of two fluted feed rollers of which one is adjustable parallel to the other; by this means the admission of material can be regulated to a nicety. At the sides and in the periphery of the rollers, adjustable scraper knives prevent the clay from coming away. All the bearings of the press have interchangeable bronze bushes. The gear wheels are encased in tightly closed cases which protect against accident or soiling by clay etc.

Our Helical Feed Press, model F L I (small model), is particularly suitable for the manufacture of hollow-ware, roofing tiles, and other more delicate goods.

Dimensions, weight, price, etc.

Model	Cylinder Diameter	Dimensions			Pulley			Approximate weight	Price	Code-word
		Lenght	Width	Height	Diam.	Width	Revs. per min.			
	mm	mm	mm	mm	mm	mm		kilos		
F L I	300	2350	1450	1500	800	150	125	1800	....	Recobrado

The moulds and attachment plates belonging to the same are charged separately to the account of the customer.



Helical Feed Press F L IIa Model

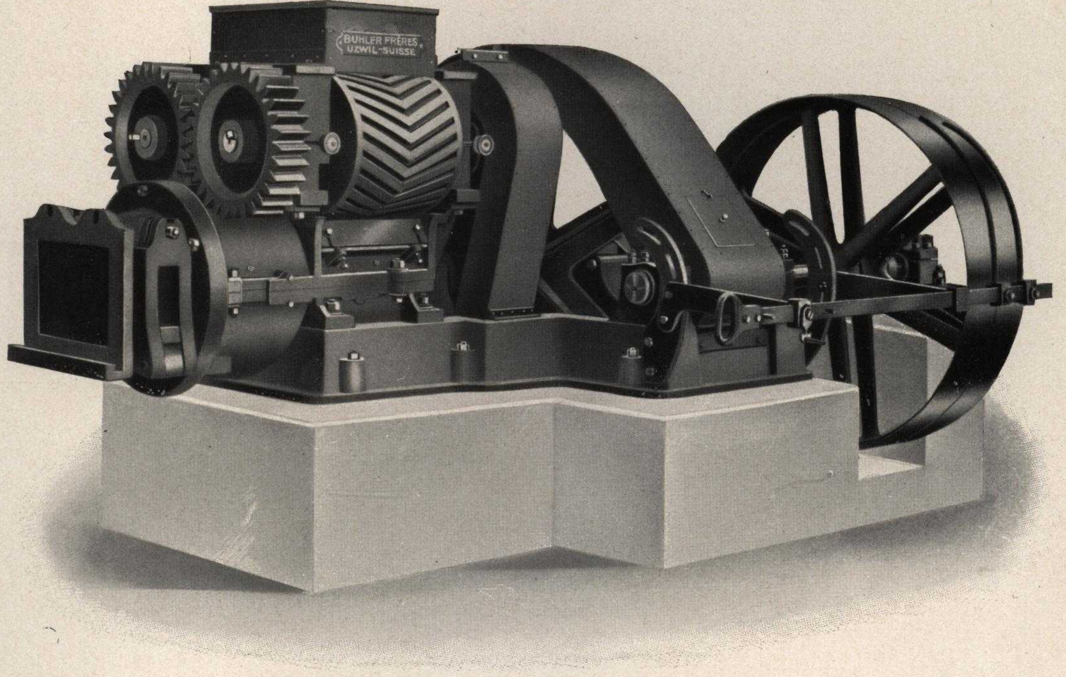
Helical Feed Press, F L II a Model.

This model is in point of size, construction and capacity exactly similar to the preceding model F L II. It differs from the latter solely through the drive, the gearing being effected by a single pair of wheels instead of by two pairs as in model F L II. To correspond to the lower speed the driving pulley is made larger.

Dimensions, weight, price etc.

Model	Cylinder diameter	Dimensions			Pulley			Approximate weight	Price	Code-Word
		Length	Width	Height	Diam.	Width	Revs. per min.			
	mm	mm	mm	mm	mm	mm		Kilos		
F L II a	400	2980	2080	1600	1100	200	150	3200	....	Recognise

The moulds and attachment plates belonging to the same are charged to the customer separately.



Helical Feed Press, F L IIIa Model

Helical Feed Press, F L III a Model

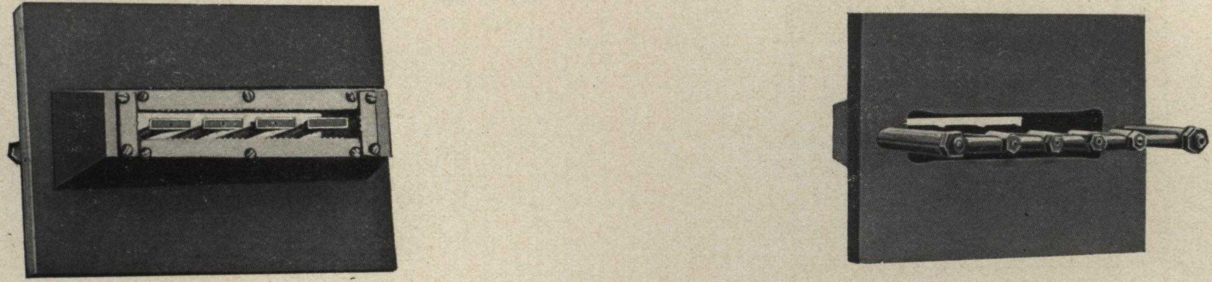
Our F L III a Helical Feed Press only differs from the standard F L III model illustrated on the previous page of this catalogue by its single gearing in place of the two sets of wheels of the latter. All other parts are as regards construction and finish analogous with those of the F L III Press, as is also the capacity.

Dimensions, weights, Prices, etc.

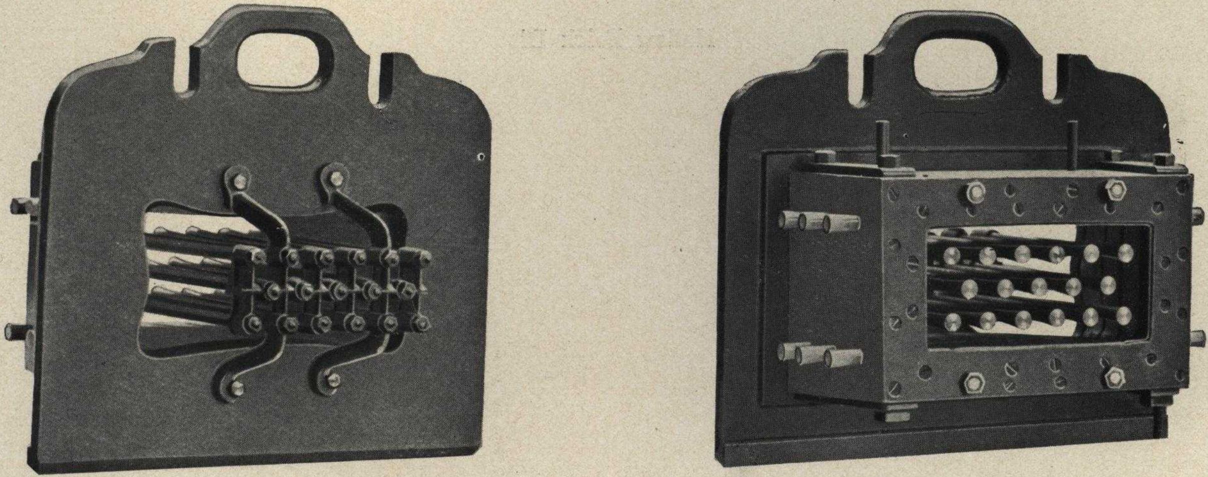
Model	Diam. of cylinder	Space occupied			Pulley		Revs. per min.	Approx. weight	Price	Code-Word
		Length	Width	Height	Diam.	Width				
	mm	mm	mm	mm	mm	mm		kg		
F L III a	450	3480	2740	1700	1300	180	150	4100		Recognitos

The moulds and attachment plates belonging to the same are charged to the customer separately.

Dies

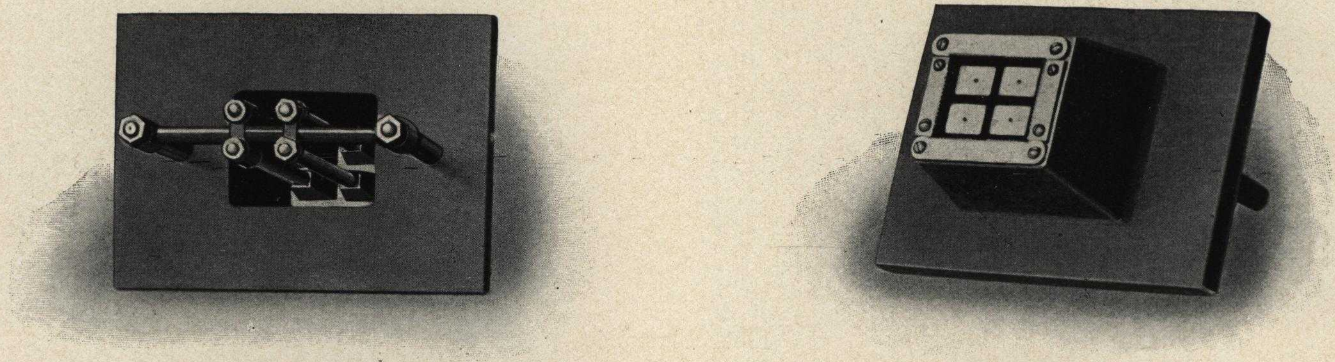


Floor Plate Die

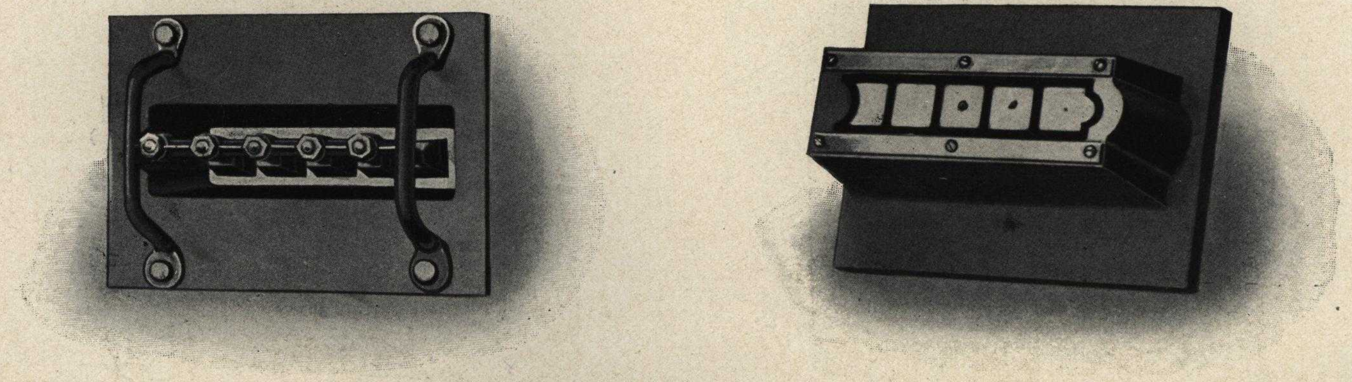


Perforated Brick Die with Water Channels.

Dies



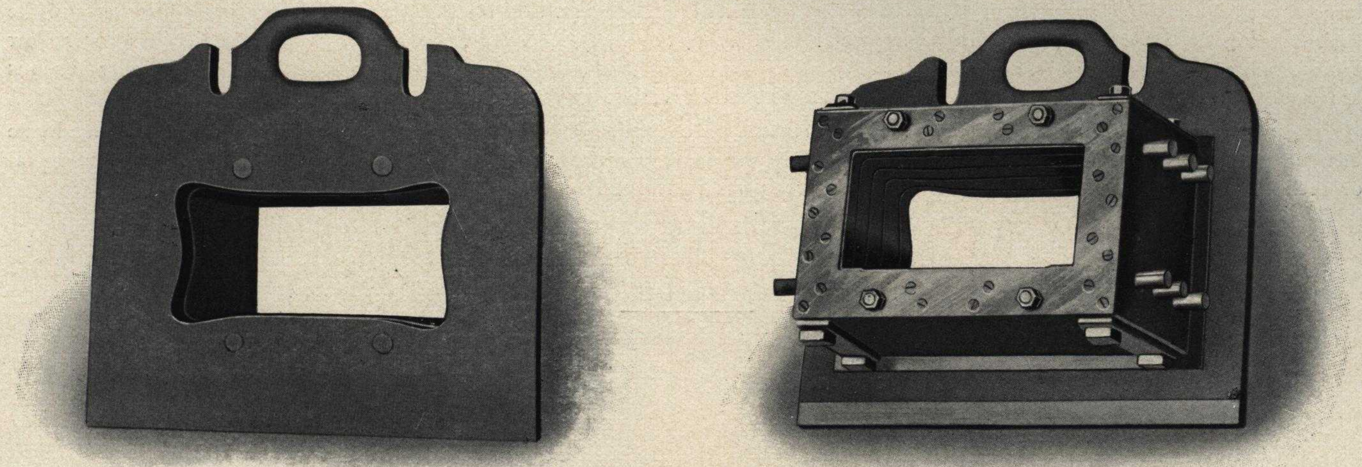
Hollow Brick Die



Arched Brick Die

Dies

Coppi-Die



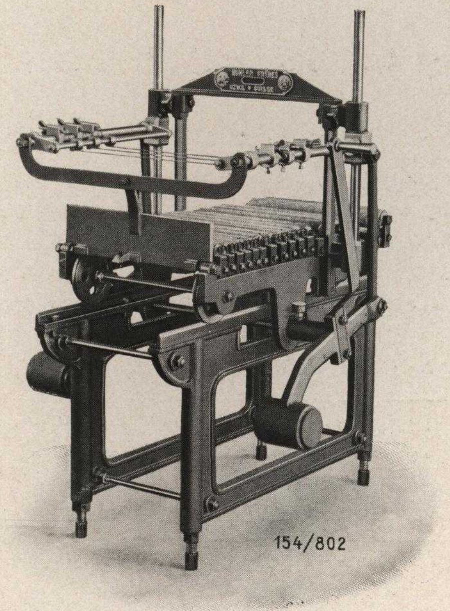
Solid Brick Die with Water Channels

Dies for Helical Feed Presses

Even the best designed Helical Feed Press will not produce the best results unless provided with Dies or Mouthpieces of scientifically sound construction. The design of these Dies is therefore of the utmost importance and has always received our most careful study and attention. It is wellknown that the same Die is not equally suitable for different materials and it is only after years of experience that one can determine in advance from a sample of the working material submitted the proper length of Die and taper etc. suitable for a certain quality of clay and so be in a position to guarantee an absolutely faultless result.

Our Solid Brick Dies are usually supplied with Water Channels and with tubes which are carried right through and can be easily cleaned, the whole construction being extremely solid throughout. — Coppi Dies are used for the semi-circular bricks so largely used by the Italians. The base of the strip is removed as it comes from the Die on a special cutting apparatus and the desired curve or taper is given to the semi-circular brick by corresponding wooden Dies during the process. — Dies for hollow bricks and partition sections are characterised by a suitably shaped and extremely solid core construction. The smaller sections are made in pairs with the strips issuing either adjacent to or above one another.

Upon receipt of drawings or samples we are prepared to construct Dies for bricks or strips in all dimensions at a moderate charge. It is always advisable, when possible, to indicate the amount of shrinkage (whether the bricks are hand or machine-made) or even to send us a sample of the material so that we can ascertain the same.



Cutting Apparatus, F K Model

Cutting Apparatus, F K Model

Our cutting apparatus, F K Model, acts vertically and is particularly suitable for the cutting of standard, perforated and hollow bricks.

The carriage, which is easily moved, rests on a cast iron stand and carries the cutting frame, which is of very solid construction and very accurately balanced in order to make it easier to manipulate. The slide which is held absolutely vertical by the cutting frame, is pressed down by the latter in cutting and brought up again when the frame is raised. The rollers, which have spindles passing through them from end to end, are of wood and covered with felt, but we also supply plaster rolls if desired.

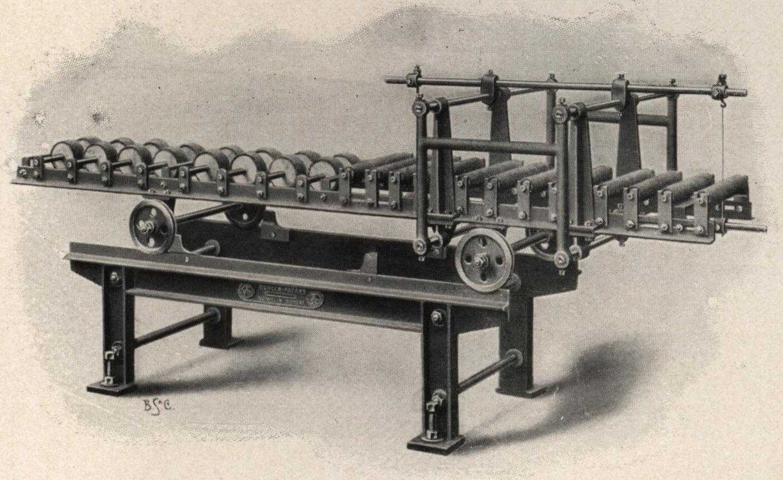
Our cutting table works quickly and easily. Thanks to the exceedingly precise vertical cutting action, the cut goods have a neat and clean appearance.

With the normal size of apparatus, sections of up to 420 mm in length, 400 mm in width and 200 mm in heigth can be cut. If desired, we can also supply larger apparatus.

Dimensions, weights, prices, etc.

Model	Dimensions in mm			Approx. weight	Price	Code-Word
	Length	Width	Height	kg		
F K	1000	850	1300	200	....	Refajo

For shearing outfit we charge .... extra.



Cutting Table F K II Model

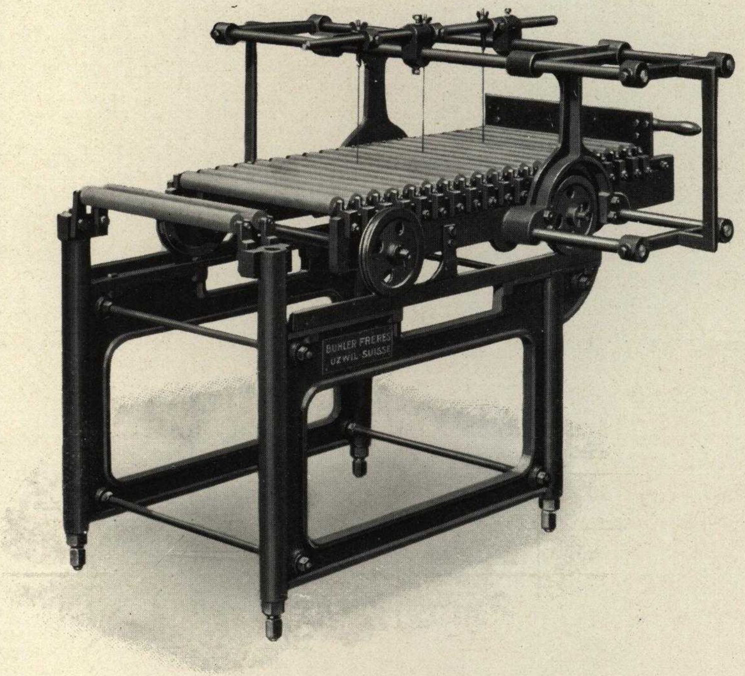
Cutting Table, F K II Model

This apparatus is particularly suitable for the economical cutting of hourdis.

The strip of material on leaving the mould is cut off to the desired length on one half of the carriage and is then conveyed to the other half and lifted off by the hourdis frame inserted between the recessed rolls, on which frame it is left until sufficiently dry. After the removal of the cut hourdis, insert another frame between the rolls and thus continue to manufacture uninterruptedly.

Dimensions, weights, prices, etc.

Model	Dimensions in mm			Approx. weight	Price	Code-Word
	Length	Width	Height			
F K II	2300	950	950	kg 190		Refinding



Cutting Apparatus, F K V Model

Cutting Apparatus, FK V Model.

Our cutting apparatus, FK V model, cuts horizontally and serves for cutting solid, perforated, hollow and figured bricks, etc. up to 700 mm length, 400 mm width and 150 mm height.

The handling of the apparatus is exceedingly simple; the cutting of the bricks is effected on each forward as well as backward movement of the cutting-frame, thus increasing the output beyond that of all other systems.

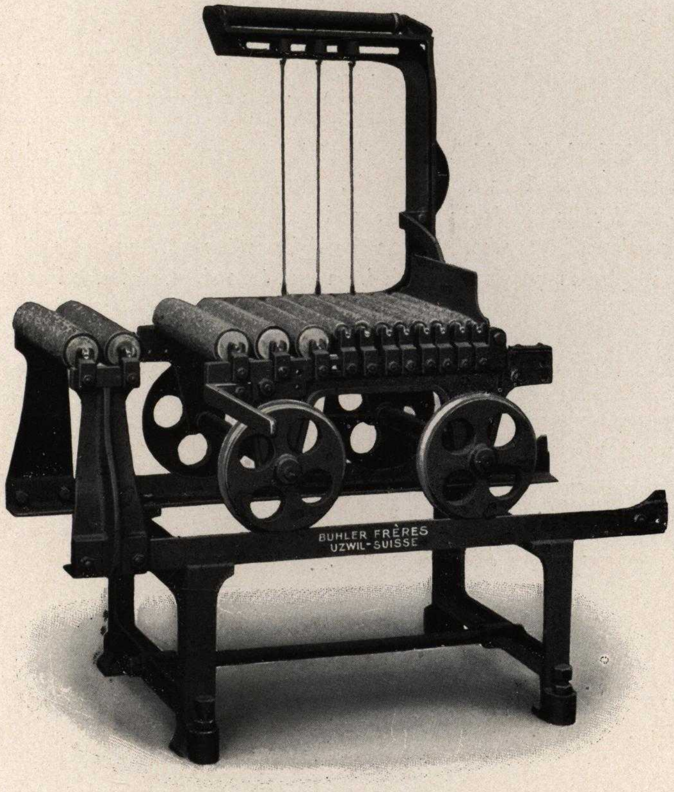
The carriage, which runs lightly on 4 rollers, rests on a strongly built frame-work, the adjusting screws of which enable the exact adjustment of the height of the apparatus.

The rolls have iron spindles passing through them, they are made of wood and covered with felt; if desired plaster rolls can also be supplied.

The construction of the apparatus is very solid and the workmanship exceedingly accurate throughout.

Dimensions, weight, price, etc.

Model	Dimensions in millimetres			Approximate weight	Price	Code-word
	Length	Width	Height	kilos		
FK V	1200	1150	1050	210	…………	Reflabo



Cutting Apparatus, F K VII Model.

Cutting Apparatus, F K VII Model

Our cutting apparatus F K VII Model, which is very suitable for cutting ordinary bricks, is particularly recommended for works in which such bricks are manufactured on a large scale.

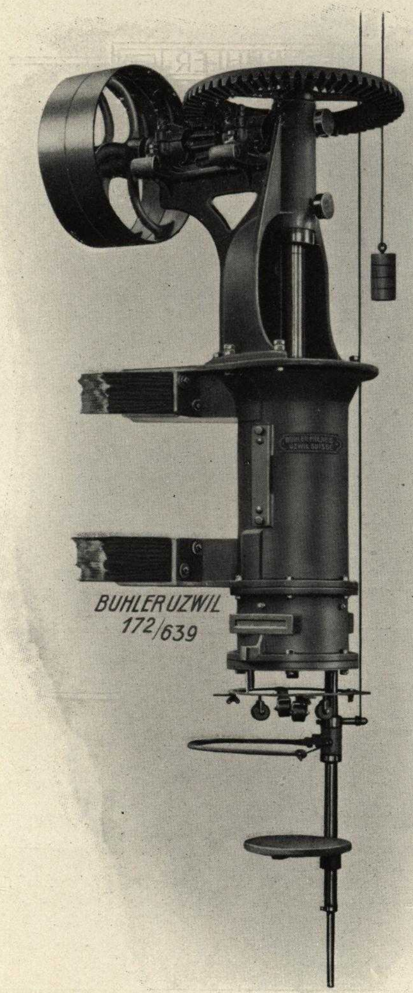
The apparatus is remarkable for its strikingly simple and substantial construction combined with easy handling. The cutting-off lever, which is excellently balanced, may be fitted on the right or the left hand side of the machine, as desired.

The rolls, which have iron spindles passing through from end to end, are of wood covered with felt; plaster rolls can also be supplied instead, if desired.

Dimensions, weights, prices, etc.

Model	Dimensions in mm			Approx. weight	Price	Code-Word
	Length	Width	Height	kg		
F K VII	1100	600	1250	130	....	Reflagito

For shearing outfit we charge .... extra.



Drain-Pipe Presses
F F O Model
Buhler's Patent

Drain-Pipe Presses, F F O Model

Buhler's Patent.

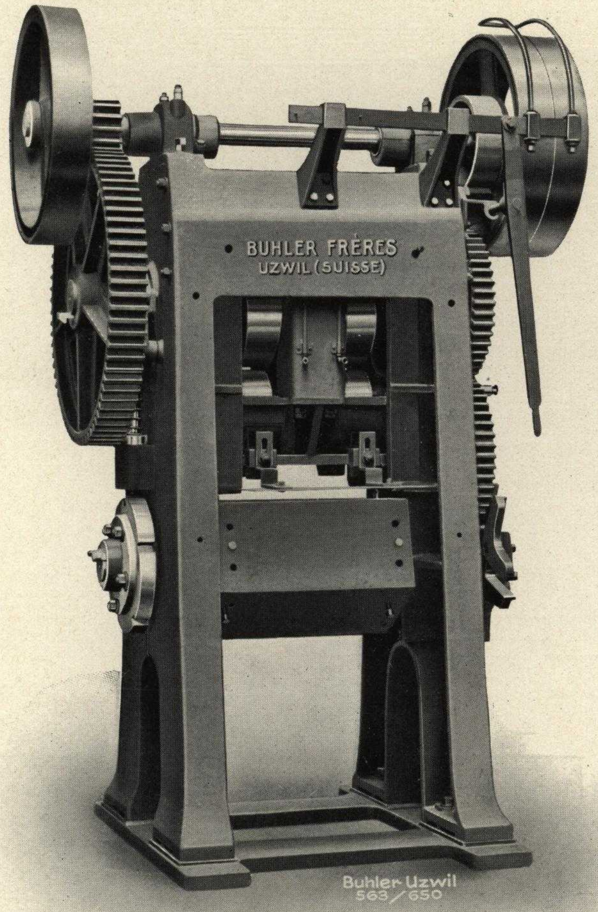
Our Patent Drain-Pipe Presses possess the great advantage of small floor space and economic power consumption. The drive is effected by means of a conical pair of wheels with fast and loose pulley, the two bearings of which are fitted into a common frame. In the case of press I, only one bearing is fitted to the frame, the second can be screwed on to two U-brackets or a wooden beam. The cutting apparatus is closely united with the press cylinder. It consists of a device for guiding the clay, the cutter proper, and a small movable round table balanced by a counterweight. The clay is guided by four plaster or felt rolls which are adjustable sideways. The cutter itself is shaped in the form of a bow, turning horizontally round a guide bar. This guide bar also carries the small table.

The treated clay is fed into the upper part of the press cylinder and is pressed by means of the helical feed through the mould fitted at the lower end of the press cylinder. The strip of material issuing is deposited on the movable table and presses the same down by its own momentum, until the desired pipe length is obtained. The cutting apparatus is now turned horizontally and severs the pipe-shaped clay, the table with the pipe section resting on it is lowered for the convenient removal of the latter and the table then returns to its original position for the next strip of material.

Dimensions, weights, prices, etc.

Size No.	Cylinder diam.	Dimensions			Pulley			Approximate weight	Prices without moulds	Code-word
		Length	Width	Height	Diam.	Width	Revs. per min.			
	mm	mm	mm	mm	mm	mm		kilos		
O	350	1800	1000	3000	650	130	110	1000	....	Redada
~~I~~	~~300~~	~~1400~~	~~900~~	~~3200~~	~~650~~	~~130~~	~~100~~	~~850~~	~~....................~~	~~Redadores~~
~~II~~	~~250~~	~~1500~~	~~800~~	~~2600~~	~~600~~	~~110~~	~~120~~	~~600~~	~~....................~~	~~Redamaret~~

Prices of moulds according to size on application.



Rotary Grooved Tile Press, F E III Model

(heavy type)

Rotary Grooved tile Press, F E III Model

(Heavy Type).

Our latest Rotary Press is the result of many years of trials and experiments combined with observation in practice. It is chiefly remarkable for its great strength and its construction, which has been thoroughly thought out in every detail.

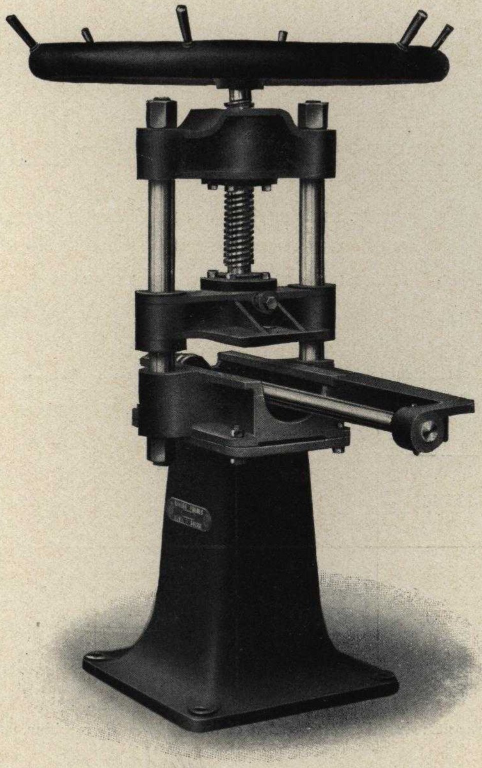
The two press eccentrics are distinct from the lift eccentric. This results in the continuous and slow pressing out of the tiles, whereby the air is gradually and entirely removed. The die of the press slides in a long guide and is quickly lifted off after the pressure has been exerted. The shifting and fixing of the drum are separate operations and can easily be mutually adjusted. The former takes place quietly without any concussion and hence without in any way injuring the machine. The turning of the rotary drum, which is in 5 parts, is limited to a nicety and uneven motion or over-shooting of the mark is out of the question.

The illustrations on the other side show the press without the working moulds. The holes in the cast iron frame are for receiving the small lubricating tubes with Stauffer boxes in order to ensure the ample and reliable greasing of all sliding and working parts.

Dimensions, weight, price, etc.

Model	Dimensions in millimetres					Revs. per min.	Approximate weight	Price	Code-word
	Machine			Pulley					
	Length	Width	Height	Diameter	Width				
							kilos		
F E III	1900	1400	2850	800	130	60	4900	....	Redoma

The matrices and working moulds are not included in the above price and are always charged extra.



Grooved-Tile Press for Hand Power
Model F W

Grooved-Tile Press for Hand Power, Model F W

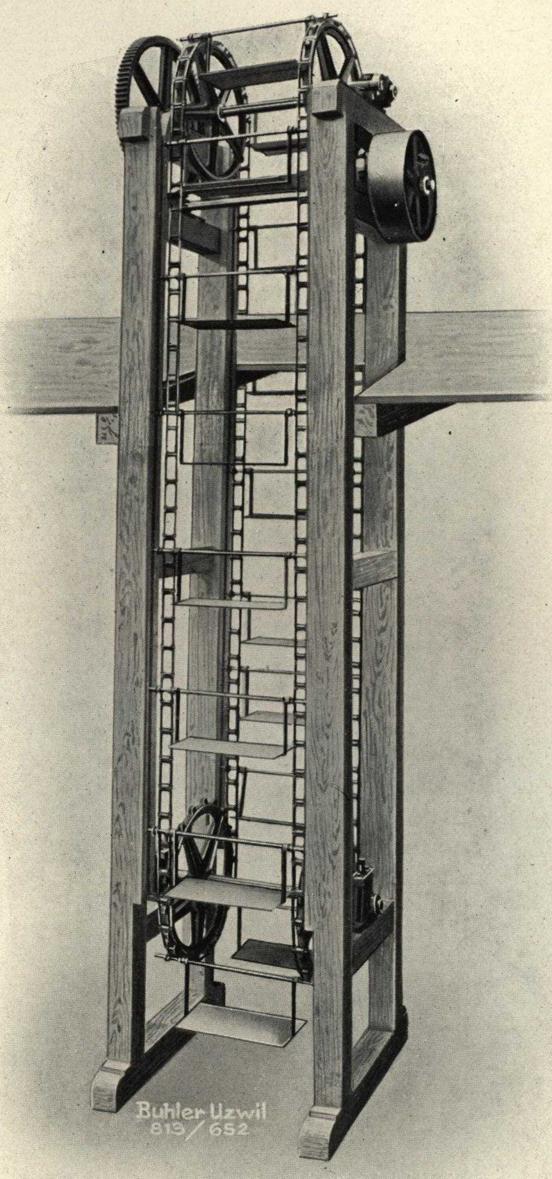
This small but exceptionally heavy and strongly constructed Hand Press is particularly intended for Grooved-Tiles, Half Gutter-Tiles etc. The width of the Slide and the length of stroke have been designed to accommodate Dies of unusual shapes.

Prices do not include the necessary Dies. These we are prepared to make at a moderate charge on receipt of drawings or patterns.

Dimensions, Weight, Price etc.

No.	Dimensions in mm			Stroke	Approx. weight	PRICE	Codeword
	Length	Width	Height				
				mm	kg		
1	1500	1250	2000	250	740	....	Redramos

The illustration on the other side is not binding concerning the construction of the parts of the machine, neither the figures given for capacity or power required.



Brick Elevator, F H Model

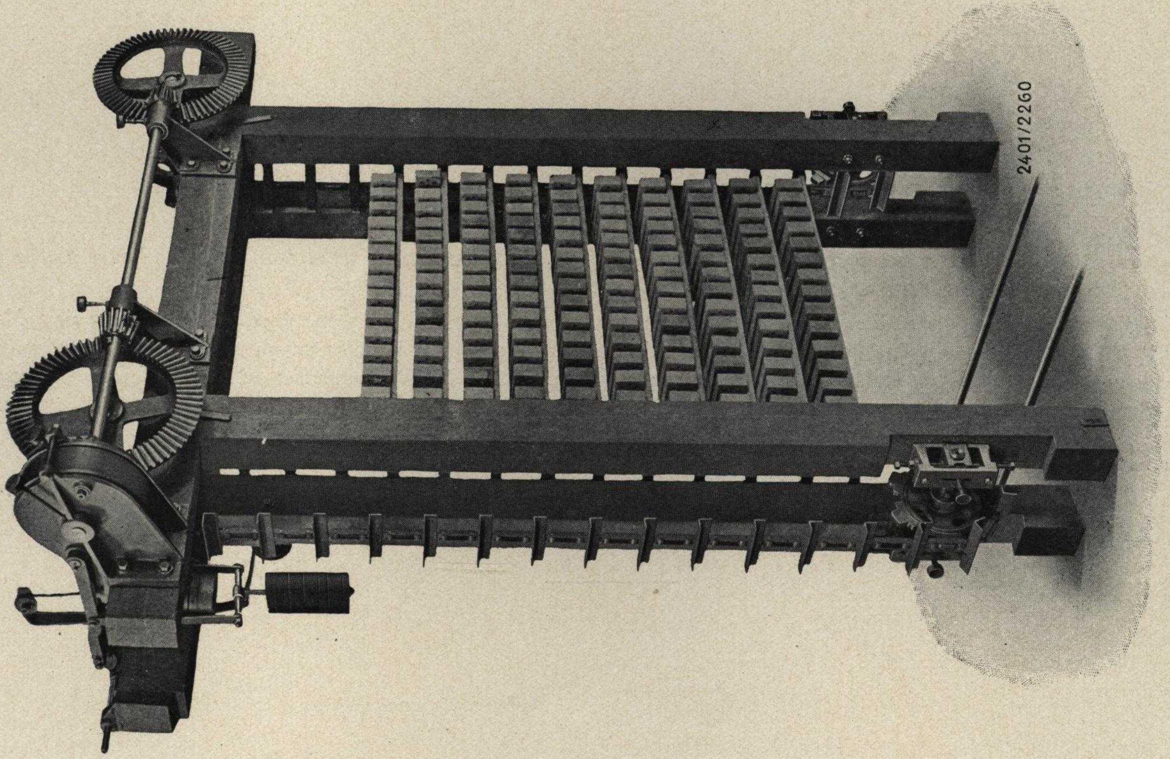
Brick Elevator, F H Model

Brick Elevators are used as a rule for conveying singly freshly moulded bricks and blocks to upper stories. For this purpose they are mounted next to the moulding machine, so that the workman engaged in removing the bricks from the latter can place them straight away on to the circulating trays. The bricks are then removed on the floor for which they are intended by a second workman, to be moved on by other conveying gear.

These Brick Elevators are mostly mounted in a wooden frame in which two chains made from tempered cast-iron, which can easily be taken apart, run in guides. All according to the height and to the quantity to be carried, the chain-links have fastened on to them a varying number of trays for receiving the freshly made bricks. The trays are supplied in various sizes.

The drive is effected direct by means of spur-wheels or bevelled wheels. It is as a rule located above and consists of fast and loose pulley, a cog-wheel gear and a rigidly borne pair of chain wheels. A similar pair of wheels is borne adjustably in sliding bearings on the opposite side so as to allow for chains stretching, in order to ensure that the chain wheels always mesh well with the chain.

In enquiring for prices always state the height of lift (distance from centre to centre) also the article to be carried. The wooden frame work is usually provided by the purchaser at his own expense.



Automatic Lowering Machine
Model F S 5

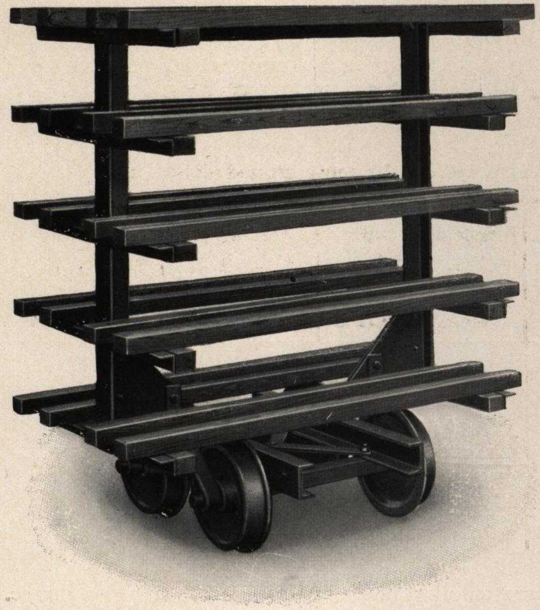
Automatic Lowering Machine, Model F S 5

This arrangement serves to convey the dried Bricks, Tiles, etc. from the one or more storied drying house to the ground floor and constitutes a further auxiliary apparatus to the Automatic Drying Machine.

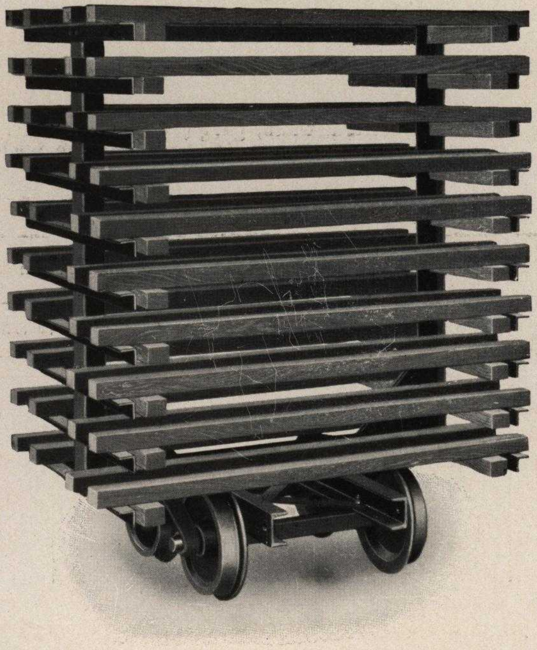
The bricks are conveyed from the stands on platform trucks and deposited with the frames in the Lowering Machine, whereupon the truck is withdrawn. The coupling is released by means of a rope and the bricks descend by their own weight. If the rope is let loose the coupling is actuated which simultaneously operates the brake mechanism and the apparatus is brought to a standstill, when the bricks can be removed on a special truck or by hand. This apparatus is of solid construction and easily worked.

The illustration on the other side is not binding concerning the construction of the parts of the machine.

Tier Trolleys for Drying Kilns.



with 5 tiers, for bricks



with 10 tiers, for tiles

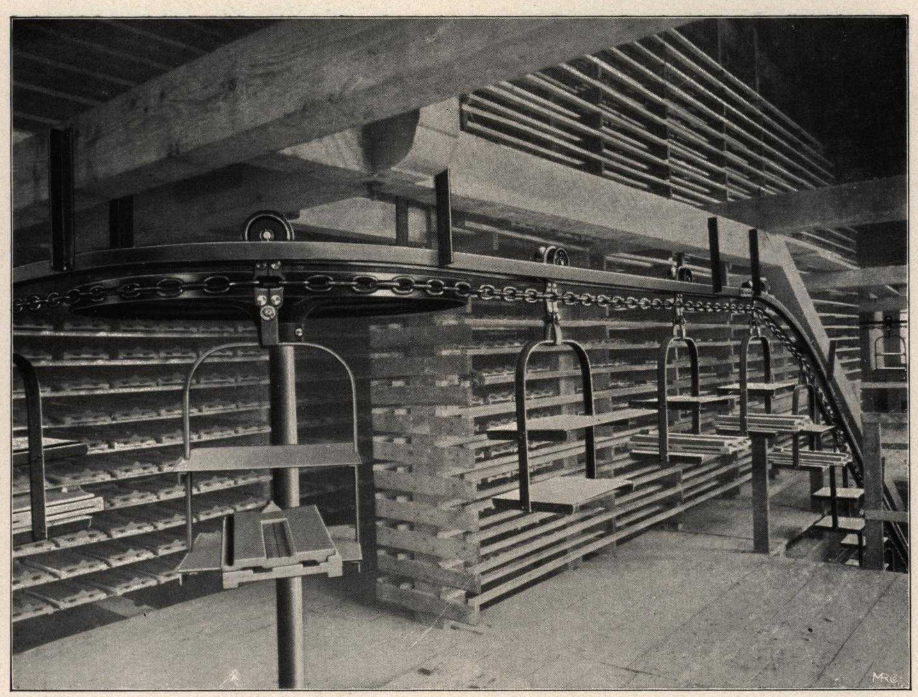
Tiers Trolleys for Drying Kilns.

For our patent flue drying kilns we have devised a special type of tier trolley, which we have introduced into our own manufacture and which is remarkable for its suitable and simple and yet substantial construction. We build standard models of the following sizes for bricks and tiles; we also make on demand any intermediate types for the most varied purposes and in all dimensions as to height and width, gauge, wheele-base etc.

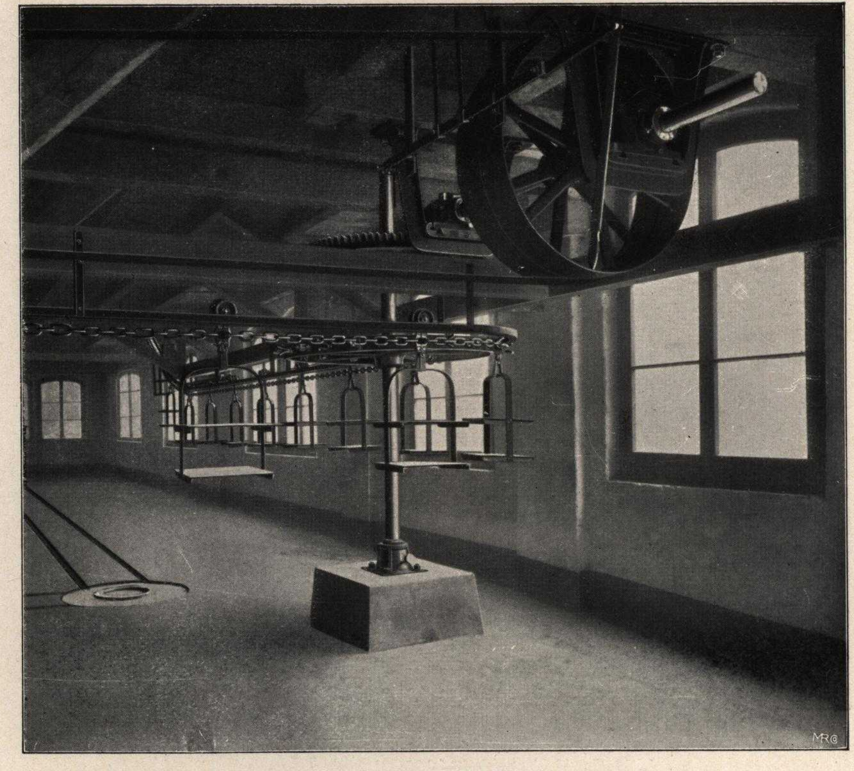
Dimensions, weights, prices, etc.

No.	Number of tiers.	Dimensions in mm					Capacity	Price	Code-Word
		Length	Width	Height	Wheel-base	Gauge			
1	5	740	1000	1250	350	500	120 Standard bricks		Rehacer
2	10	900	1000	1370	350	500	100 Tiles		Rehacias
3	6	900	1200	1600	400	500	216 Standard bricks		Rehagais
4	12	900	1200	1600	400	500	144 Tiles		Rehagan

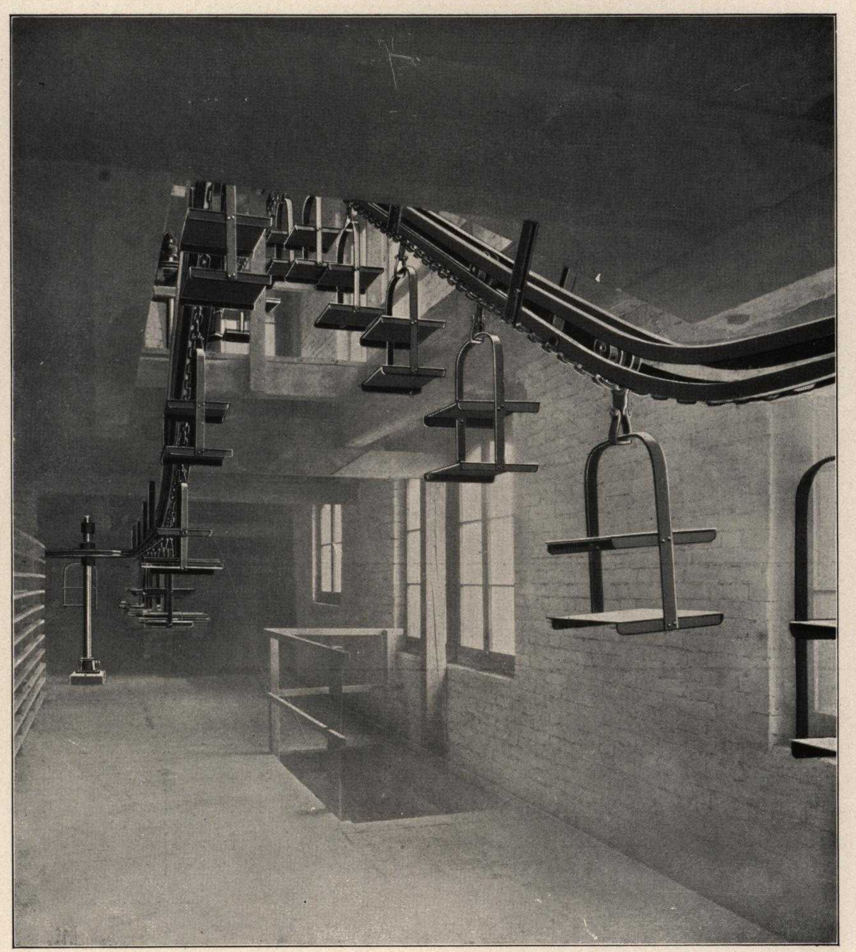
All prices are quoted WITHOUT tile frames of wood or iron, which are only supplied on order and at an extra charge.



Circulating Conveyor, F Q Model,
Corner Arrangement with descending Path.



Circulating Conveyor, F Q Model,
Driving Gear, overhead arrangement.



Circulating Conveyor,
F Q Model,
ascending
and descending path,
with Corner
Arrangement.

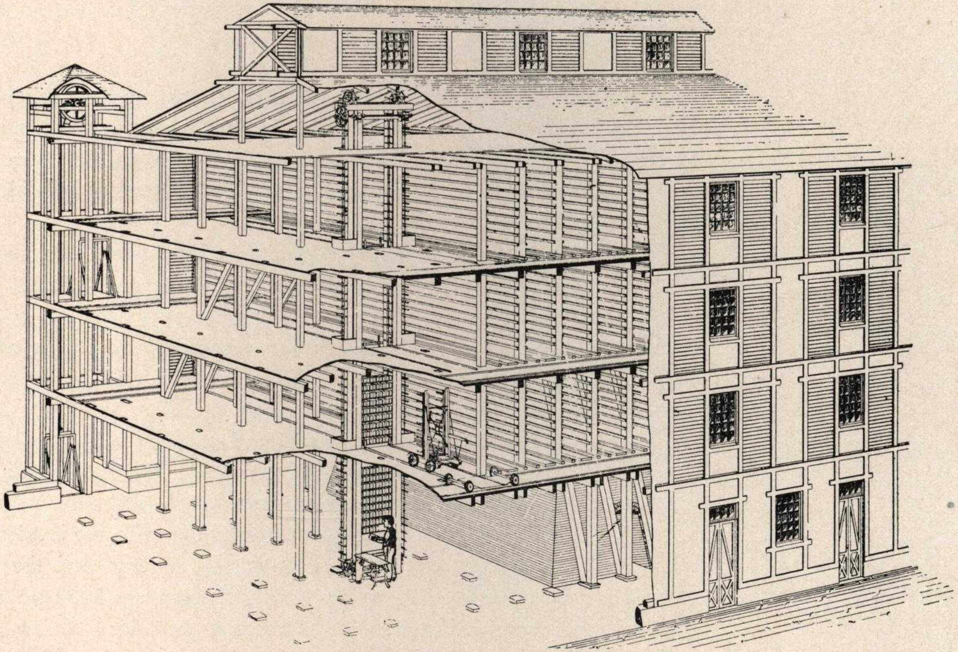
Circulating Conveyor, F Q Model

The Circulating Conveyor has been adopted everywhere with great succes, both in large and small concerns, wherever it is a question of conveying newly made bricks, dried or burnt goods over long distances or to other floors. Our F Q Model meets the most exacting requirements as to light, quiet and reliable running and adaptibility to all circumstances. To suit the local conditions, we supply the drive with fast and loose pulley, either on a pedestal on the floor or suspended overhead. The trays are furnished of the type to suit the local requirements, with one or several plates. The goods to be conveyed can be deposited or removed at any point of the endless chain.

Our tension arrangement with sliding tension carriage and adjustable counter-weights ensure absolutely smooth running under any load, as the tension on the chain always remains uniform. The chain itself is wrought from the very best material and amply dimensioned even for the greatest distances. The trays pivot easily in steel gudgeons in the direction of the chain; the vertical shaft of the drive is borne in a special step-bearing.

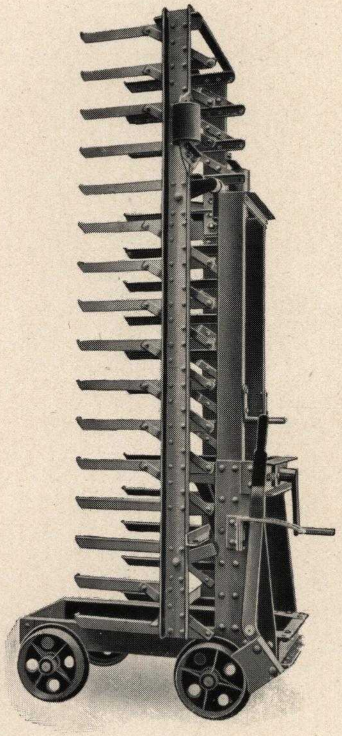
Dimensions, weights, prices, etc.

No.	Description	Approx. weight	Price	Code-Word
		kg		
I	Driving gear with fast and loose pulley 1 m × 150 mm shaft and a pair of bevel wheels	1130		Refluidos
II	Tension arrangement with sliding carriage, guide-wheel, frame etc. . .	490		
III	Corner arrangement with guide-wheel and vertical shaft	265		
IV	Chain with standard trays, rollers and track, per m	27		



Automatic Elevator, F S Model

Automatic Elevator, F S Model



Taking-off Trolley

For the transport of the rough bricks to the various floors of the drying-kiln building so-called Elevators are used. Our F S Model works automatically and consist mainly of two flat-link chains parallel to one another and moving up and down respectively through all the drying floors; these chains are furnished with brackets on which battens or boards about 1100 mm in length are placed.

The elevator chains move slowly, that is to say at a speed corresponding to the capacity of the works, and the operator has plenty of time to take off 6 to 12 bricks, according to size, at a time.

In case of any breakdown, such as the snapping of the cutting wire, etc. the operator can stop the elevator by a simple manipulation of the hand, so that on restarting all the slabs can be fully laden.

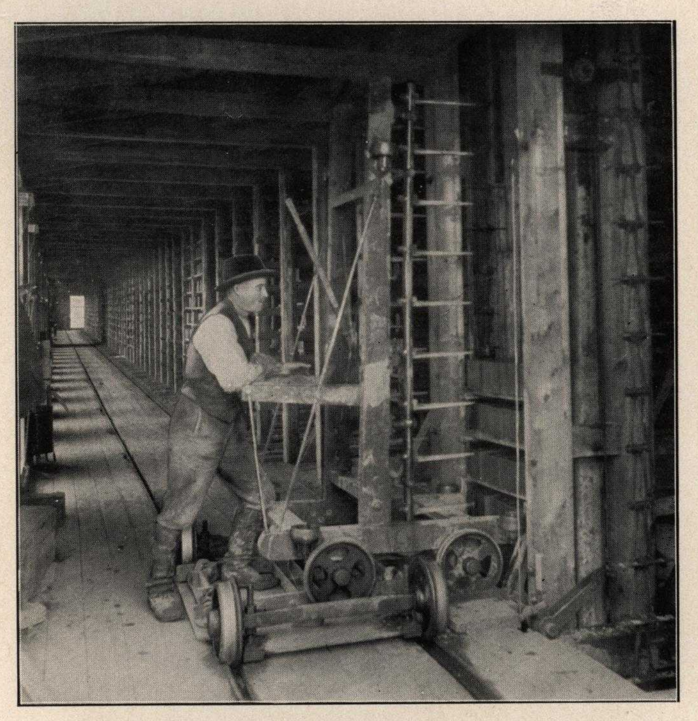
As soon as 10 battens have reached the floor of the drying plant where the bricks are deposited for drying, the elevator stops by itself. The bricks and the battens are now removed from the elevator by the specially constructed taking-off trolleys in the following manner: The trolley is pushed in against the Elevator with the brackets under the battens on which the bricks are lying. By a single motion of the hand the brackets and the 10 battens together with the 60—120 bricks resting thereon are lifted up and the trolley thus laden is then withdrawn. The elevator thereupon continues its automatic motion. The trolley is pulled back to a traversing platform which runs on rails in the gangways along the outer walls of the building.

When the trolley, having been brought up by means on the traversing platform, is at the point where bricks are to be deposited, it is pushed in and by a single movement of the hand the 10 battens with bricks are deposited on the shelves nailed to the wooden pillars of the drying frame, the latter thus being filled from top to bottom with raw bricks.

Thereupon the empty trolley is brought back in the traversing platform and carried by it to the elevator, where in the meantime fresh layers of bricks have been put in, so that the trolley can take a new load and convey it to the drying frame.

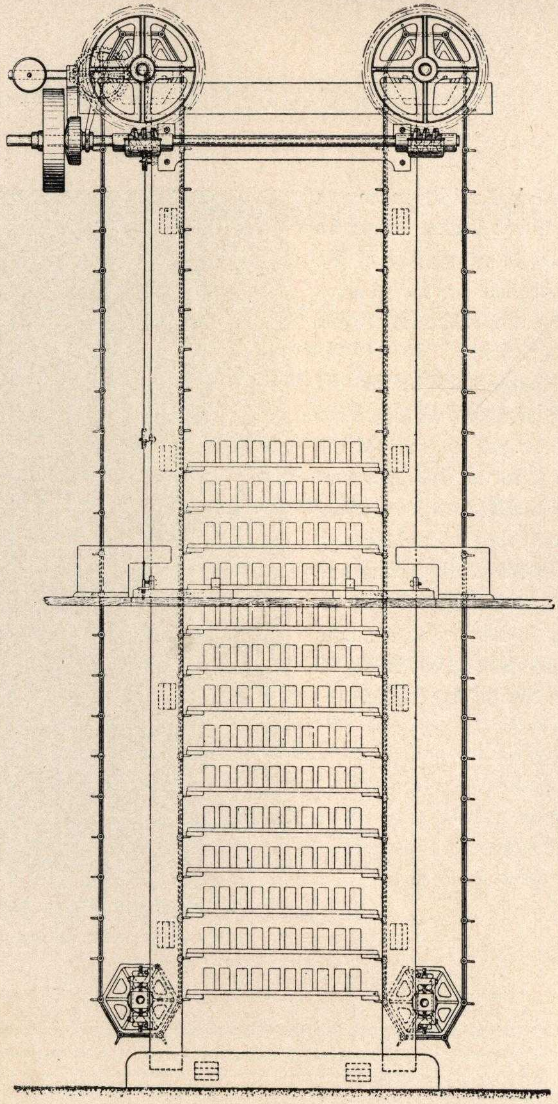
The wet bricks are therefore only handled on the cutting table and there is therefore no risk of their being injured through breaking of the edges etc. on insertion in the drying frame and in removal.

This system also means a saving in labour, as a single workman can under normal circumstances stack 12,000 to 25,000 bricks per day, all according to size, in the drying frame.



Pushing the empty taking-off Trolley into the Elevator for taking off a Load of Bricks.

BUHLER

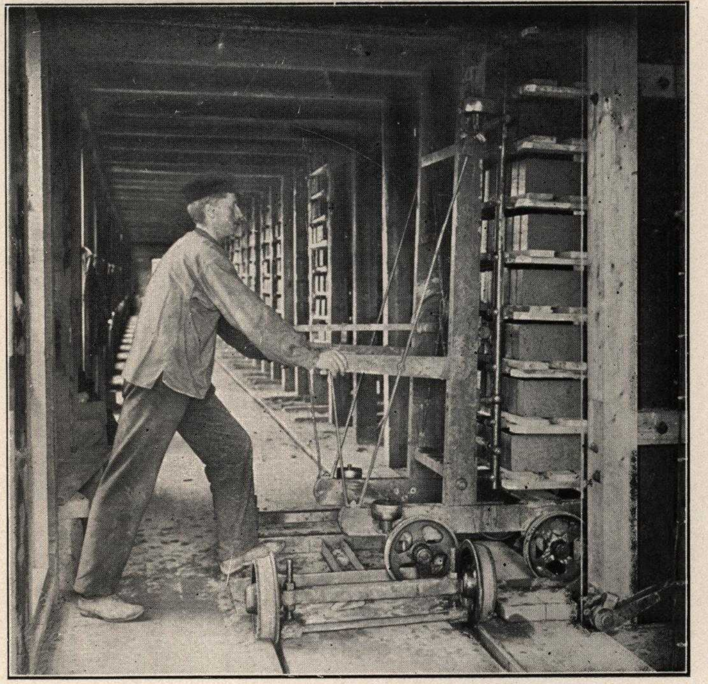


Flat-link Chain Hoist

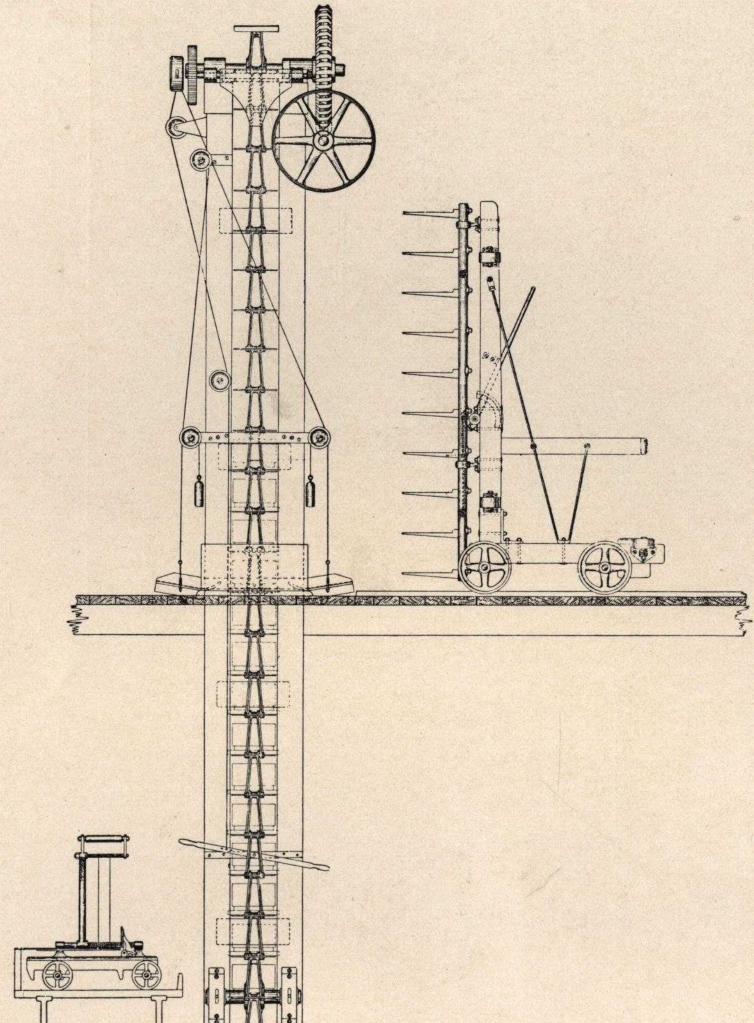
When the bricks are dry, they are removed from the battens and carried away in the ordinary wheelbarrows which are then lowered by lifts to the lowermost floor.

The empty battens are brought back to the elevator by a boy, who can also attend to their insertion into the elevator, but the work can also be done by a special automatic apparatus.

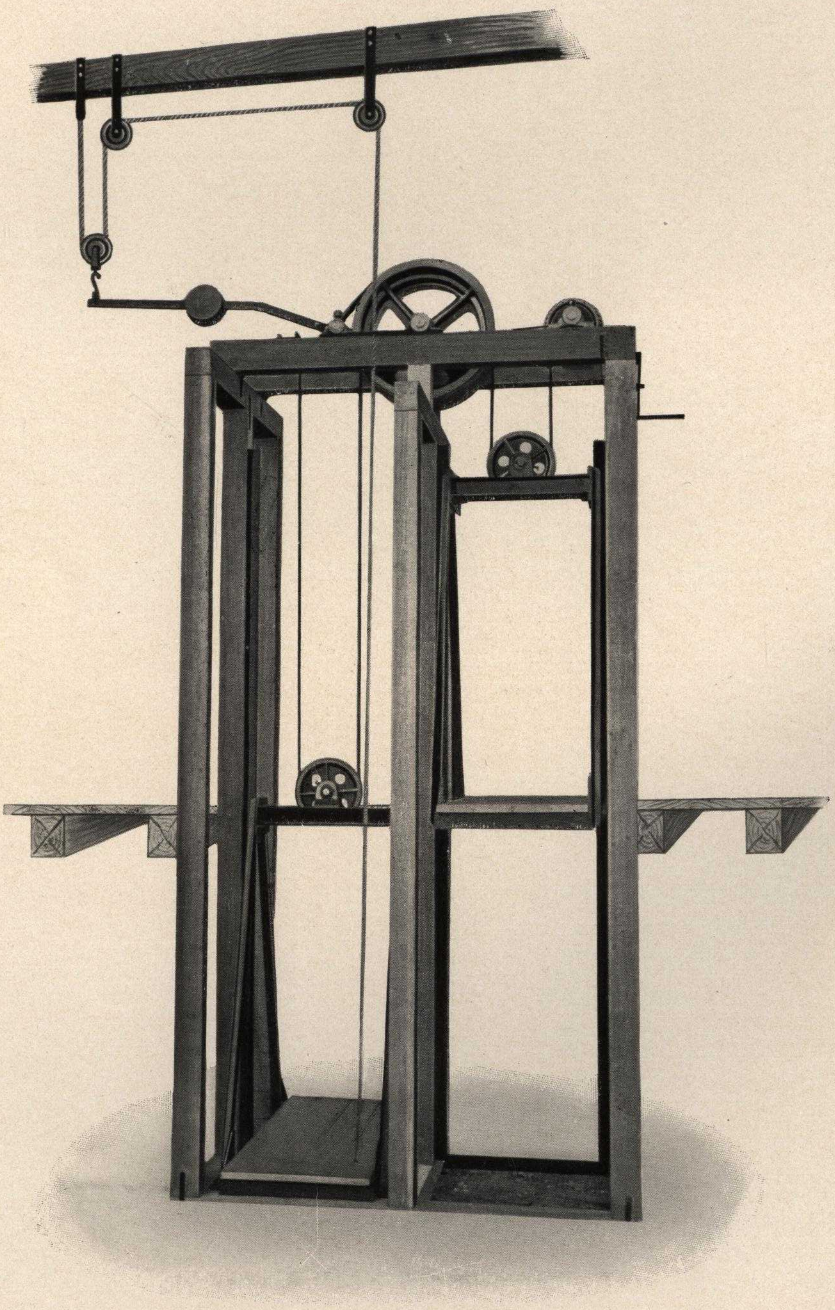
The great advantages of this system are obvious and are fully appreciatet in trade circles, with the result that this automatic elevator has in a short time become very popular.



Withdrawal of the loaded taking-off Trolley



Flat-link Chain Hoist with taking-off Trolley



Lowering Hoist, F M Model

BUHLER

Lowering Hoist, F M Model

The lowering hoist is specially intended for use in drying sheds of several floors, as used in the case of kilns with superstructure. It serves for conveying the dried goods from the upper floors to the sole of the kiln. The dried goods are put on trolleys and in this way the transport from the drying frames to the kiln can be effected without reloading.

The apparatus consists of a rope drum well supported in bearings, with a brake pulley fitted with differential brake. Carrying trays are suspended on the ends of ropes running over a rope drum, and these can be adjusted so as to stop at the various floors by means of a compensating winch. No special power drive is required.

Our lowering hoist is operated as follows:

The tray stopped at the upper floor is charged with a loaded trolley, while the other tray, standing at the sole of the kiln, receives an empty trolley. On the brake being released by means of a hand-rope, the tray bearing the loaded trolley will decend owing to its heavier weight, while that carrying the empty trolley will be raised. The brake is then put on again and after the trolleys have been changed the same process is repeated.

If space is limited, this arrangement may also be carried out with one tray, with counterpoise weight, but of course the performance of the apparatus is thereby reduced by one half.

The wooden frame-work and the hand rope are not included in the delivery and must supplied by the client.